

STEREO CASSETTE DECK

KX-5060S

SERVICE MANUAL

KENWOOD

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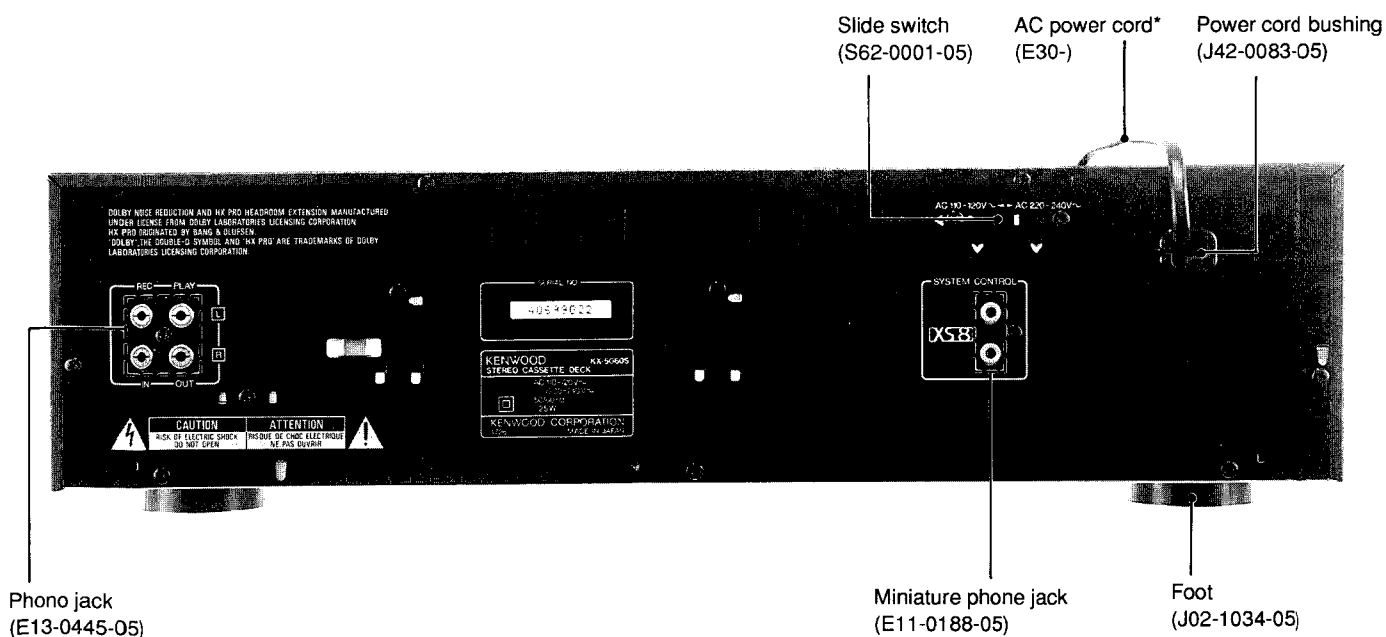
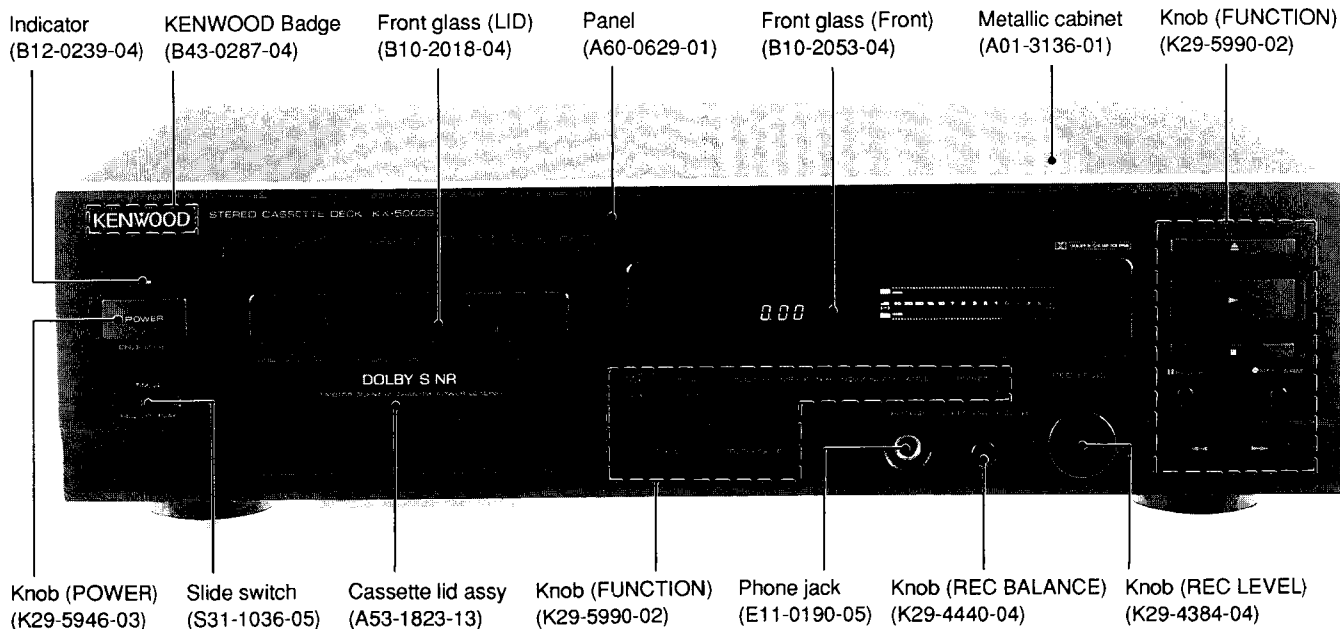


Photo is KX-5060S M type.

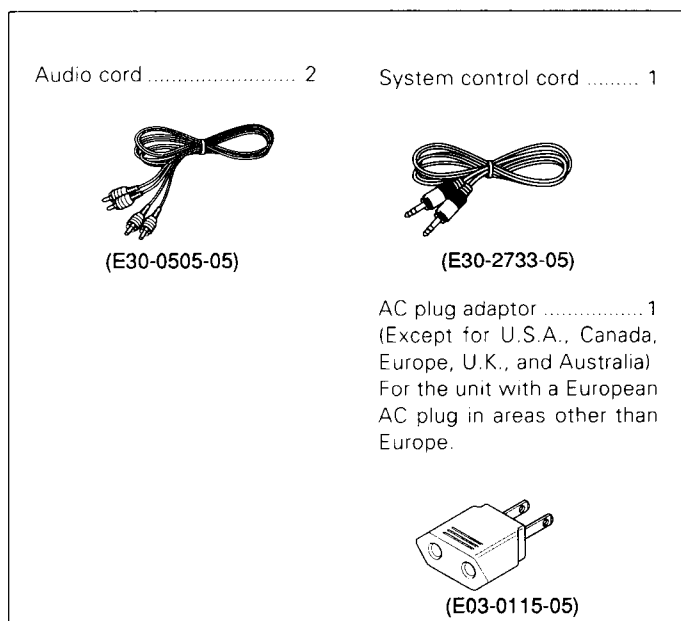
* Refer to parts list on page 37.

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ACCESSORIES



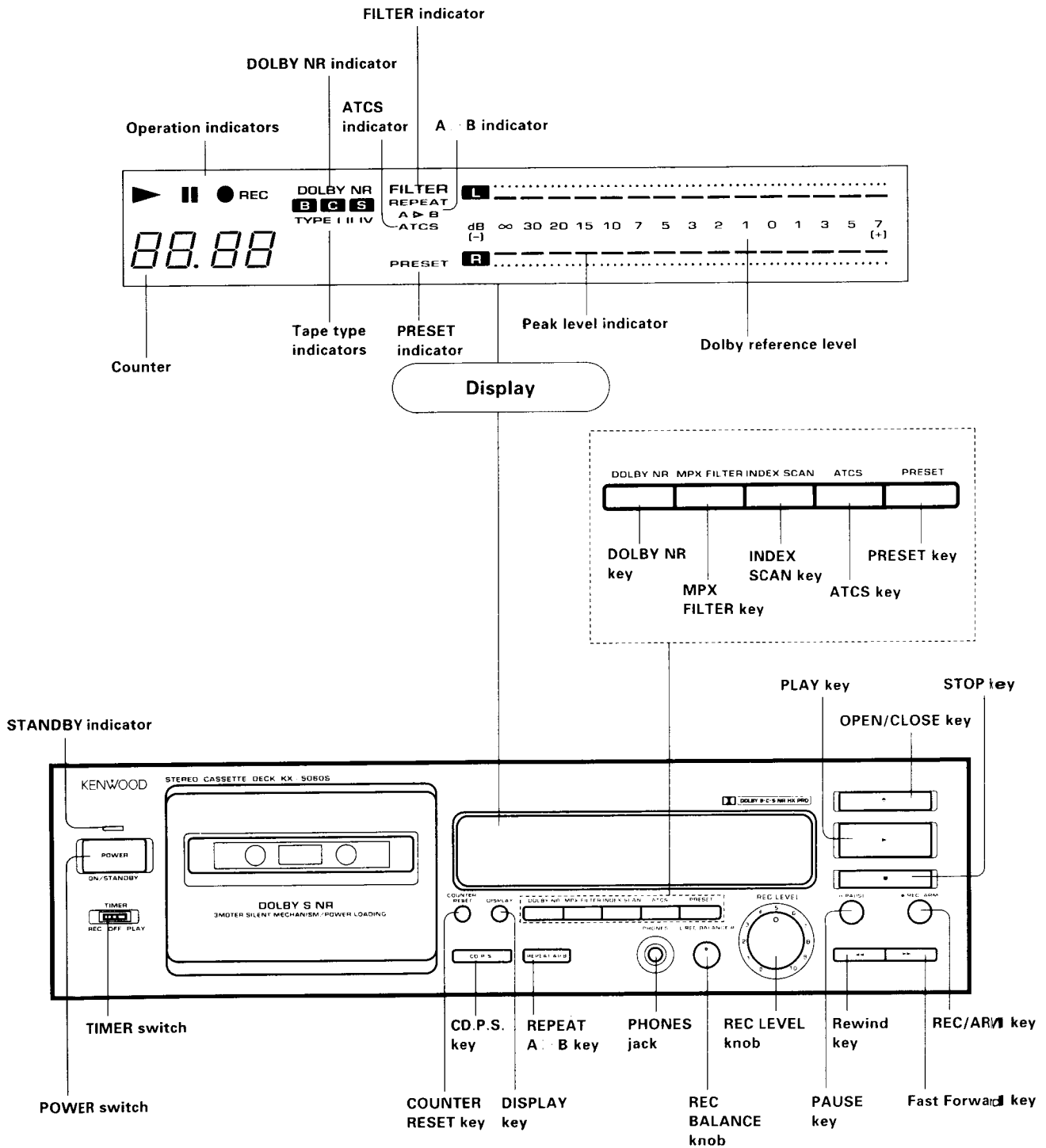
Beware of condensation

When water vapor comes into contact with the surface of cold material, water drops are produced. If condensation occurs, correct operation may not be possible, or the unit may not function correctly. This is not a malfunction, however, and the unit should be dried.
(To do this, turn the POWER switch ON and leave the unit as it is for several hours.)

Be especially careful in the following conditions :

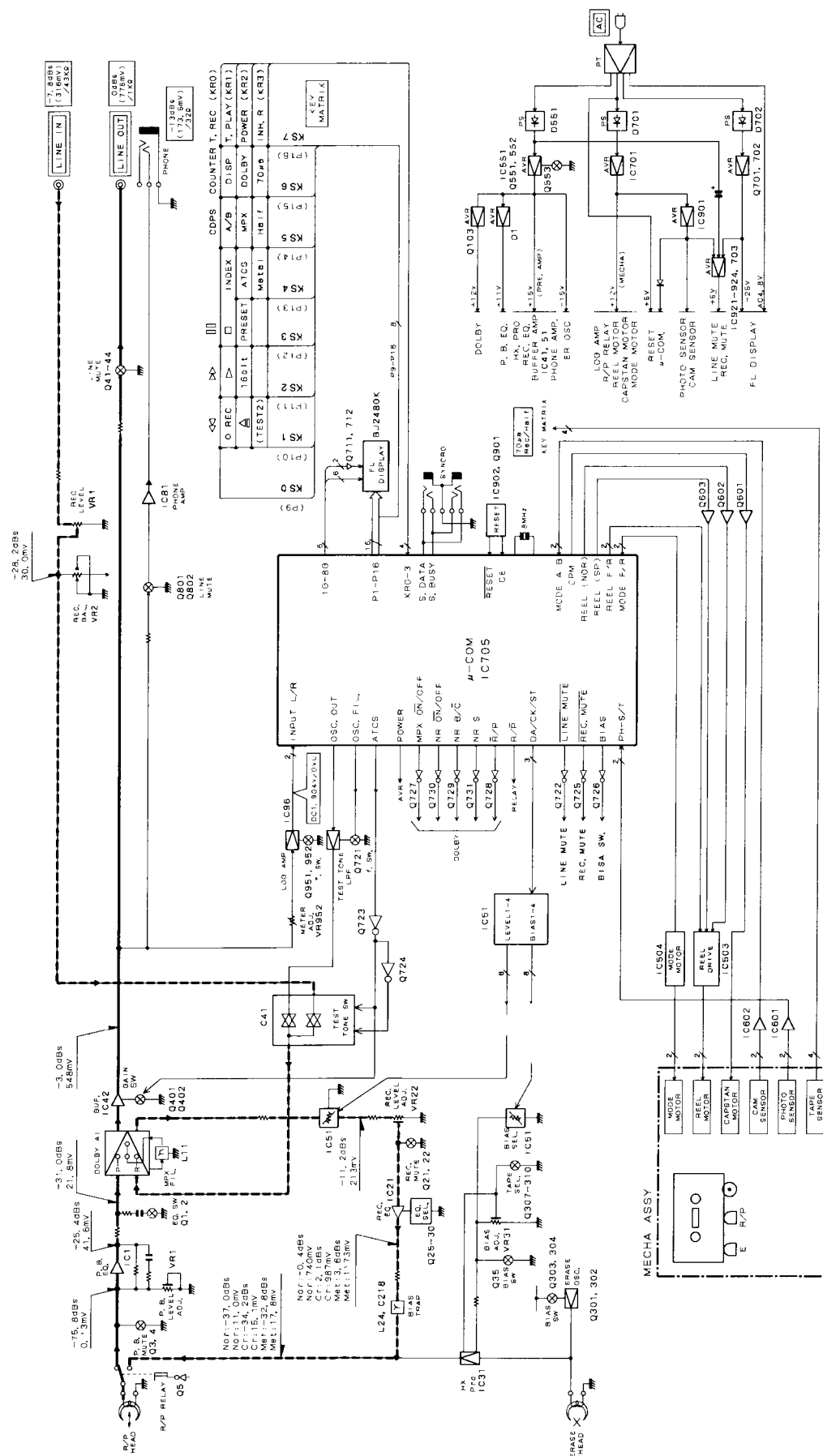
- When the unit is brought from a cold place to a warm place, and there is a large temperature difference.
- When a heater starts operating.
- When the unit is brought from an air-conditioned place to a place of high temperature with high humidity.
- When there is a large difference between the internal temperature of the unit and the ambient temperature, or in conditions where condensation occurs easily.

CONTROL



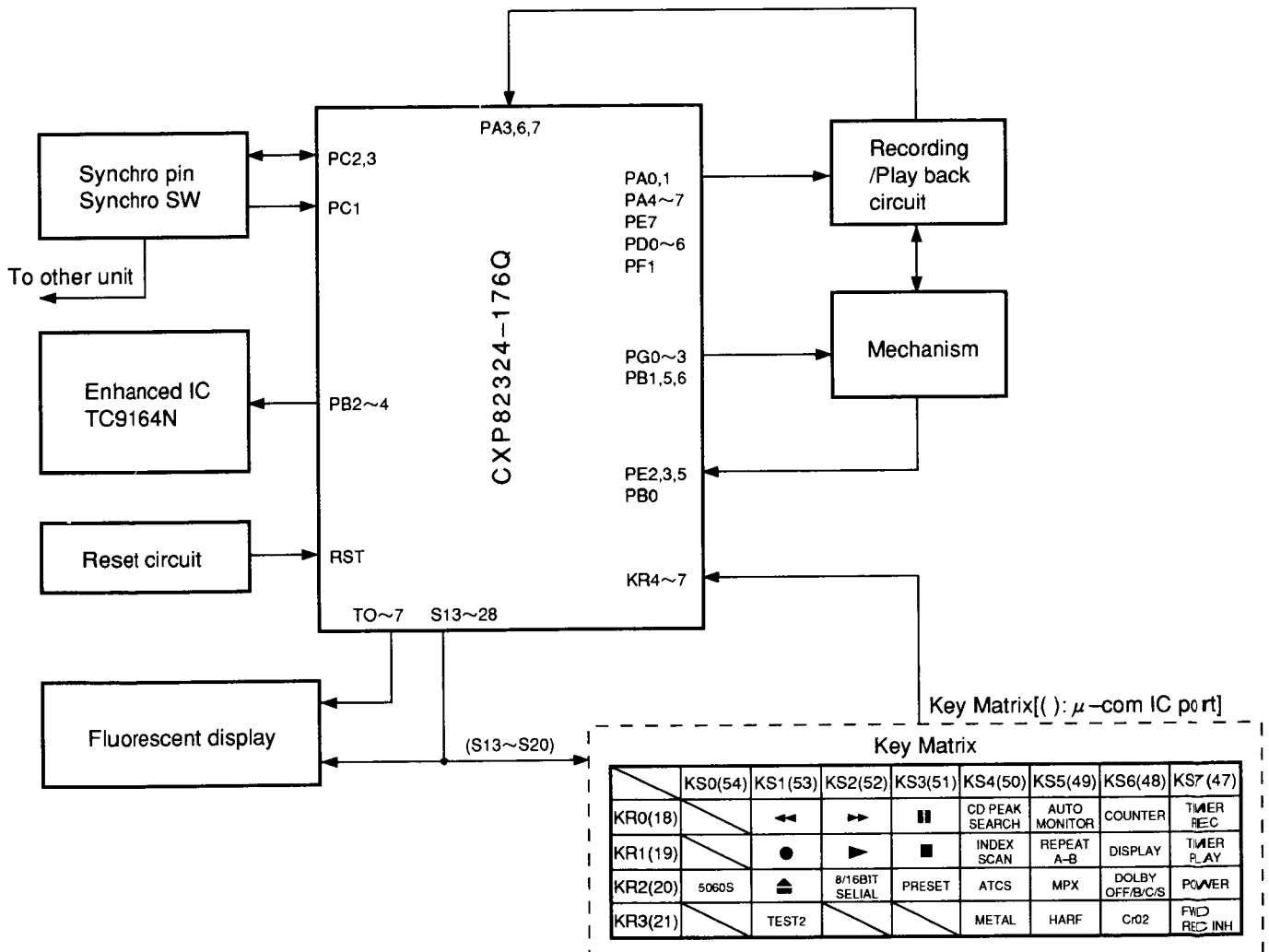
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BLOCK DIAGRAM



CIRCUIT DESCRIPTION

Microprocessor block diagram

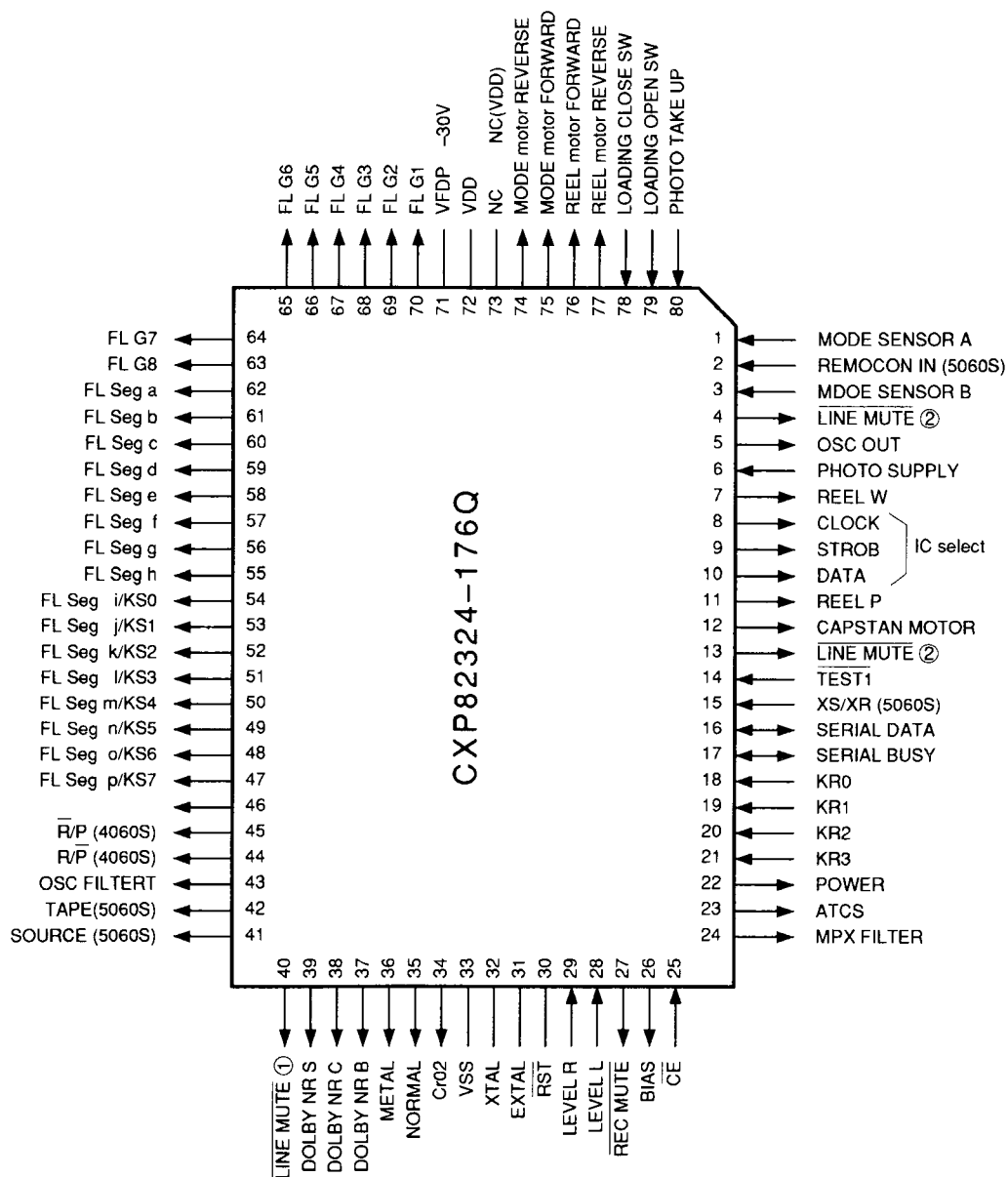


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CIRCUIT DESCRIPTION

Microprocessor (CXP82324-176Q):(X26-: IC705)

Pin connection



CIRCUIT DESCRIPTION

Pin Description

Pin No.	Name	I/O	Description
1	MODE SENSOR A	I	Mode photo refracter A
2	REMOCON IN	I	Remocon Input
3	MODE SENSOR B	I	Mode photo refracter B
4	LINE MUTE ②	O	Line mute control ②
5	OSC OUT	O	Output square wave using TIMER2
6	PHOTO SUPPLY	I	Supply side photo sensor input
7	REEL W	O	Reel speed selection
8	CLOCK	O	Clock for sending data to selector IC
9	STROB	O	Strobe for sending data to selector IC
10	DATA	O	Data for sending data to selector IC
11	REEL P	O	Reel speed selection
12	CAPSTAN MOTOR	O	Capstan motor ON/OFF
13	LINE MUTE ②	O	Line mute control ②
14	TEST1	I	Test mode detection 1. Test mode is or when low.
15	XS/XR	I	XS/XR selection input
16	SERIAL DATA	I/O	Serial communication with other equipments (DATA)
17	SERIAL BUSY	I/O	Serial communication with other equipments (BUSY)
18	KR 0	I	Return pin of auto key scan
19	KR 1	I	Return pin of auto key scan
20	KR 2	I	Return pin of auto key scan
21	KR 3	I	Return pin of auto key scan
22	POWER	O	Power port H : POWER ON
23	ATCS	O	On when ATCS is running. Off when other status
24	MPX FILTER	O	MPX filter (High = ON)
25	CE	I	Detects chip enable
26	BIAS	O	Bias oscillator control
27	REC MUTE	O	Rec mute control
28	LEVEL L	I	A/D level input L ch
29	LEVEL R	I	A/D level input R ch
30	RST		Reset pin for microcomputer. L → H : Reset
31	EXTAL		System clock oscillator connection
32	XTAL		System clock oscillator connection
33	VSS		GND
34	CrO2	O	High only at CrO2 position
35	NORMAL	O	High only NORMAL position
36	METAL	O	High only METAL position
37	DOLBY NR B	O	ON when Dolby-B is selected
38	DOLBY NR C	O	ON when Dolby-C is selected
39	DOLBY NR S	O	ON when Dolby-S is selected
40	LINE MUTE ①	O	Line mute control ①
41	SOURCE	O	Monitor output. ON when SOURCE selected
42	TAPE	O	Monitor output. ON when TAPE selected
43	OSC FILTER	O	OSC Filter selection (400/12.5k)

CIRCUIT DESCRIPTION

Pin No.	Name	I/O	Description
44	R/ \overline{P}	O	REC/PB selection (High = REC)
45	\overline{R} /P	O	REC/PB selection (High = PLAY)
46		O	Unused
47	FL Seg p/KS 7	O	SEGMENT OUTPUT FOR FDP : p Auto key scan output KS7
48	FL Seg o/KS 6	O	SEGMENT OUTPUT FOR FDP : o Auto key scan output KS6
49	FL Seg n/KS 5	O	SEGMENT OUTPUT FOR FDP : n Auto key scan output KS5
50	FL Seg m/KS 4	O	SEGMENT OUTPUT FOR FDP : m Auto key scan output KS4
51	FL Seg l/KS 3	O	SEGMENT OUTPUT FOR FDP : l Auto key scan output KS3
52	FL Seg k/KS 2	O	SEGMENT OUTPUT FOR FDP : k Auto key scan output KS2
53	FL Seg j/KS 1	O	SEGMENT OUTPUT FOR FDP : j Auto key scan output KS1
54	FL Seg i/KS 0	O	SEGMENT OUTPUT FOR FDP : i Auto key scan output KS0
55	FL Seg h	O	SEGMENT OUTPUT FOR FDP : h
56	FL Seg g	O	SEGMENT OUTPUT FOR FDP : g
57	FL Seg f	O	SEGMENT OUTPUT FOR FDP : f
58	FL Seg e	O	SEGMENT OUTPUT FOR FDP : e
59	FL Seg d	O	SEGMENT OUTPUT FOR FDP : d
60	FL Seg c	O	SEGMENT OUTPUT FOR FDP : c
61	FL Seg b	O	SEGMENT OUTPUT FOR FDP : b
62	FL Seg a	O	SEGMENT OUTPUT FOR FDP : a
63	FL G 8	O	Grid output for FDP : 8G
64	FL G 7	O	Grid output for FDP : 7G
65	FL G 6	O	Grid output for FDP : 6G
66	FL G 5	O	Grid output for FDP : 5G
67	FL G 4	O	Grid output for FDP : 4G
68	FL G 3	O	Grid output for FDP : 3G
69	FL G 2	O	Grid output for FDP : 2G
70	FL G 1	O	Grid output for FDP : 1G
71	V FDP -30V		Power supply pin for driving the FDP (-30[V])
72	VDD		μ - COM Power supply (+5[V])
73	NC (VDD)		
74	MODE motor REVERSE	O	Mode motor rotary control (Reverse)
75	MODE motor FORWARD	O	Mode motor rotary control (Forward)
76	REEL motor FORWARD	O	Reel motor rotary control (Forward)
77	REEL motor REVERSE	O	Reel motor rotary control (Reverse)
78	LOADING CLOSE SW	I	Cassete lid close sw input
79	LOADING OPEN SW	I	Cassete lid open sw input
80	PHOTO TAKE UP	I	Take-up side photo sensor input

CIRCUIT DESCRIPTION

OPERATION SPECIFICATIONS MANUAL

1. FEATURES

- ① 3-motor, 3-head, dual-capstan mechanism
- ② HX-PRO
- ③ ATCS/PRESET
- ④ Power loading
- ⑤ DPSS
- ⑥ CD peak search
- ⑦ Dolby B/C/S
- ⑧ XS8/XR (XS8, XR) (8bit/16bit)
- ⑨ Remote controllable

2. XS8/XR MARK(XS8, XR)SYSTEM CONTROL

When the AC power is switched on with the synchro mode switch set to XS, combining with an XS mark (XS) amp, receiver, etc., makes easy bidirectional operation possible. Also, combining with an XS mark (XS) CD makes CD peak searches possible.

When the AC power is switched on with the synchro mode switch set to XR, combining with an XR mark (XR) amp makes it possible to control the deck with the amp remote controller. Also, combining with an XR mark (XR) CD makes CD peak searches possible.

3. STATE BY DESTINATION AND MODEL

If there is diode switch at KS0 (Pin 54) and KR2 (Pin 20), the model is the KX-7060S. If not, the model is KX-5060S.

4. DEFAULT STATES

4.1 Main unit default states

ITEM	STATE
POWER	OFF
DOLBY	OFF
AUTO MONITOR	TAPE
MPX FILTER	OFF
COUNTER	0.00
DISPLAY	ALL-DISPLAY MODE
ATCS	OFF
PRESET	OFF

4.2 Selector IC default states

TC9164N			
Lch		Rch	
ITEM	STATE	ITEM	STATE
LEVEL 1 L	ON	LEVEL 1 R	ON
LEVEL 2 L	ON	LEVEL 2 R	ON
LEVEL 3 L	ON	LEVEL 3 R	ON
LEVEL 4 L	OFF	LEVEL 4 R	OFF
BIAS 1 L	ON	BIAS 1 R	ON
BIAS 2 L	ON	BIAS 2 R	ON
BIAS 3 L	ON	BIAS 3 R	ON
BIAS 4 L	OFF	BIAS 4 R	OFF


4.3 Backed up data

- POWER
- DOLBY
- Linear counter
- MPX FILTER
- RESET
- ATCS data (NORMAL, CrO2, METAL)

※ Putting the unit into test mode and pressing the Pause key or switching on the AC power while holding down the Stop key initializes the unit.

CIRCUIT DESCRIPTION

5. TEST MODE

Setting method Test Test pin ④  ⑤
For main unit

Shorting either of the two pairs of terminals then switching on the power puts the unit into the corresponding test mode.

- Ending test mode: Pause the unit or turned off the AC power. The contents of test mode are not backed up.

5.1 Test 1 specifications

(1) All-lit display

- The display comes on 500 ms after the power is turned on and for about 2 seconds the entire display lights up. At the end of the all-lit display, key input can be accepted.

(2) Mechanical turned display

The state of each of the mechanical turned is displayed of the level meter when the line meter is on.

(3) Direct change

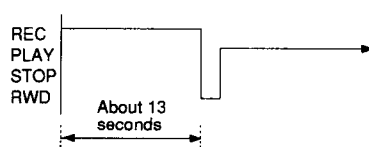
Even in play mode, the unit goes directly into record mode.

(4) Timer play

When the Timer switch is set to PLAY, the unit enters minimum-time (about 2-second) play mode.

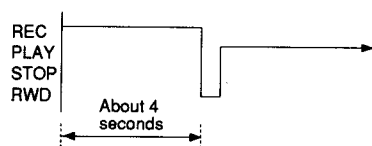
(5) Timer recording

When the Timer switch is set to REC, the unit records for 13 seconds with Dolby B, rewinds automatically, and plays back with Dolby B. The Dolby mode can be changed with the Dolby key.



(6) 4-second recording

When you press the REC key, the unit records for 4 seconds, then automatically rewinds and plays back those 4 seconds. During recording, if you press the REC key again, 4 seconds are recorded from that time. For a normal tape, the Dolby is off for the recording and play back; for a chrome tape, Dolby C is used, and for metal tape Dolby S is used.



(7) ATCS (Automatic tape calibration system)

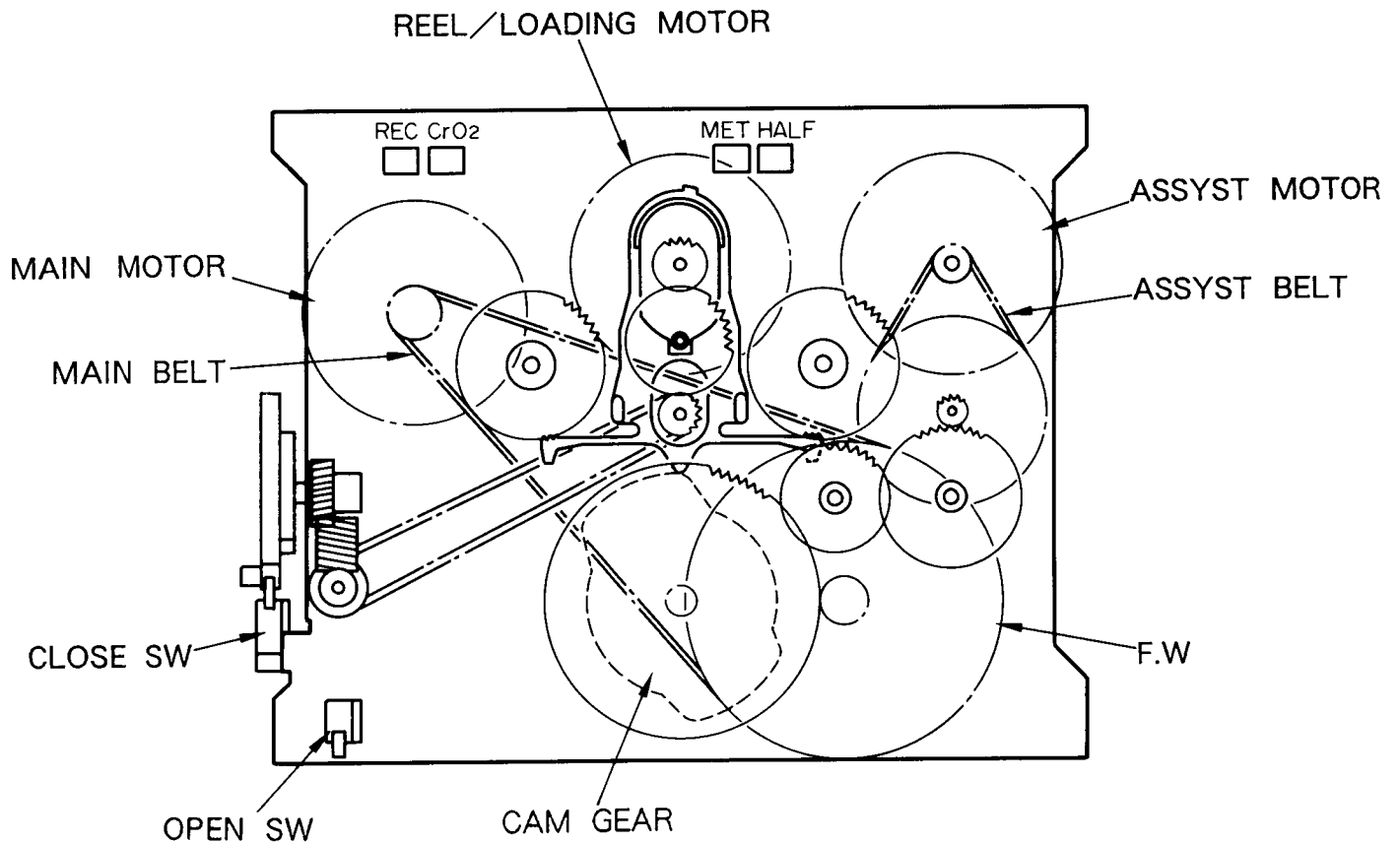
Setting time reduced (maximum about 45 seconds → about 37 seconds)

(8) Preset

The bias and level value recording and call out times have been reduced.

(9) The holder position is held at the previous position, whether or not the cord is plugged in.

MECHANISM DESCRIPTION

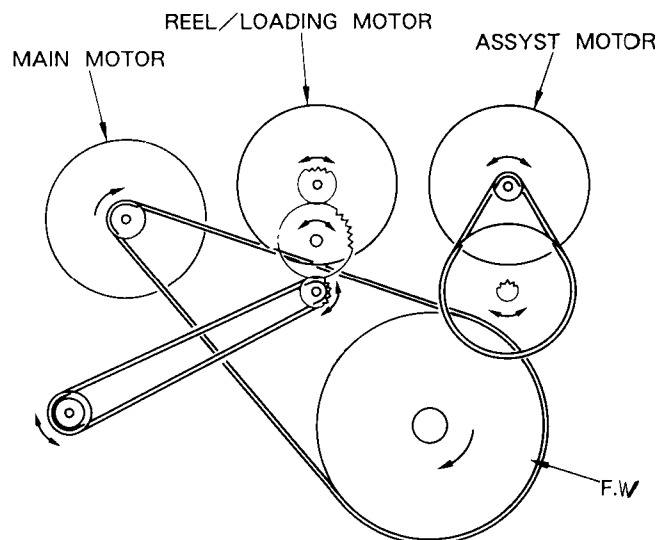


Mechanism specification

Use of parts

MM	T42-0560-08	DC MOTOR ASSY (CAPSTAN)
RM	T42-0592-08	DC MOTOR ASSY
AM	T42-0593-08	DC MOTOR ASSY
BM	D16-0299-08	MAIN BELT
BR	D16-0325-08	BELT

PLAY Torque: 35 ~ 55 g.cm
 FF/RWD Torque: 70 ~ 160 g.cm
 Back Tension Torque: 2 ~ 5 g.cm



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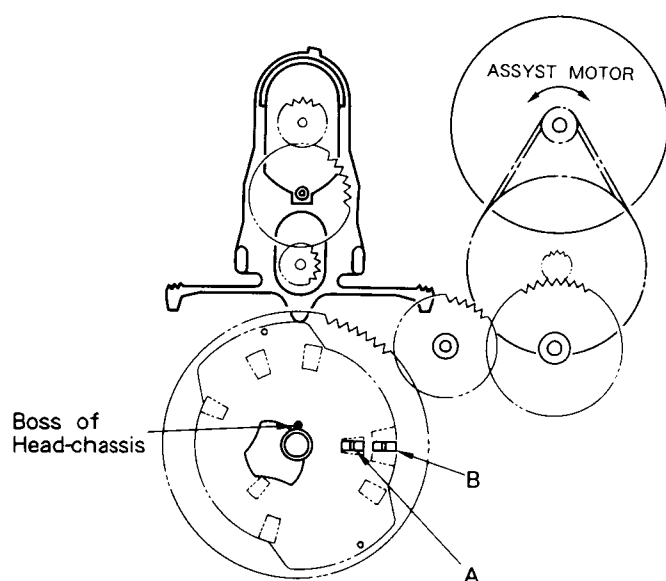
MECHANISM DESCRIPTION

STOP/OPEN/CLS

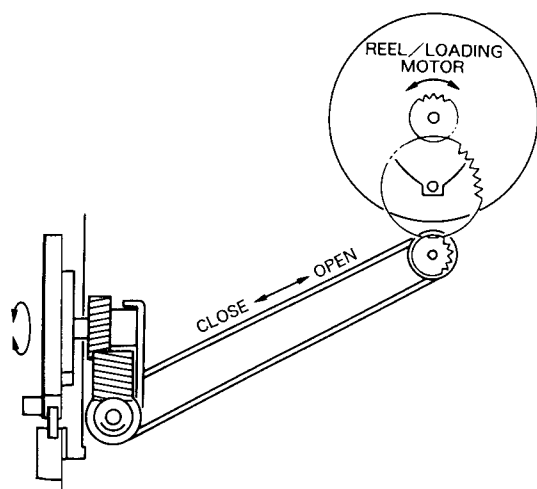
- ① The assist motor rotates, and sets the mechanism to the STOP position by watching the state of the mechanism position detection SW.

Both mechanism position detection SW A and B stop at the ON position.

The brake ASSY is pushed up, and the reel idler is fixed. The head is pushed down, because the cam of the cam gear is at the position shown in the figure.



- ② The rotation of the reel motor rotates the OPEN/CLOSE pulley via reel idler.



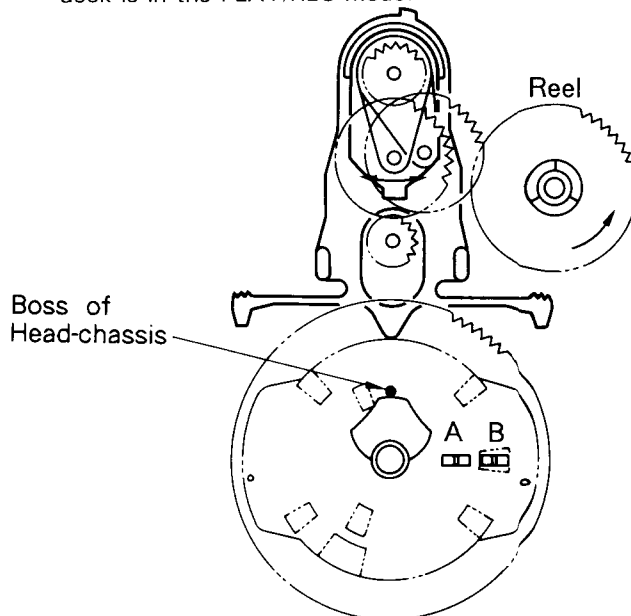
PLAY/REC

- ③ Rotate the assist motor, and adjust the cam gear by watching the state of the mechanism position detection SW.

A OFF H B ON L corresponds to the PLAY/REC position.

At this position the pulley is engaged with the reel, and the tape is wound by the rotation of the reel motor.

The head is raised by the cam of the cam gear, and the deck is in the PLAY/REC mode.



FF/RWD

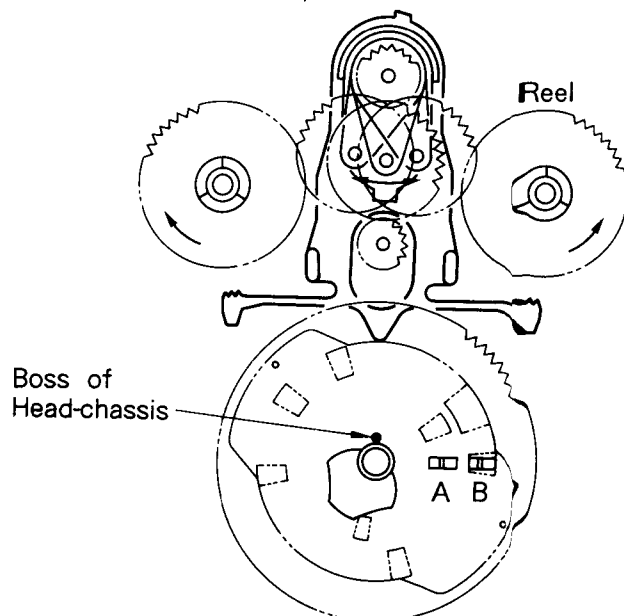
- ④ The cam gear is adjusted by the rotation of the assist motor.

A OFF B ON

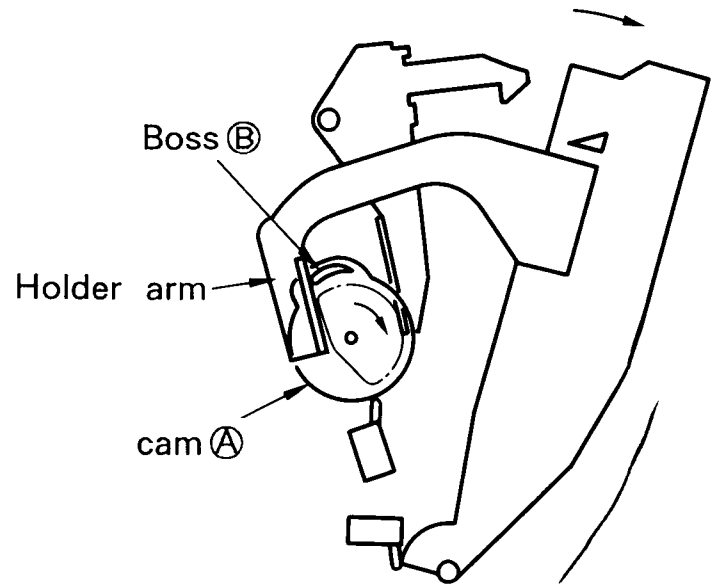
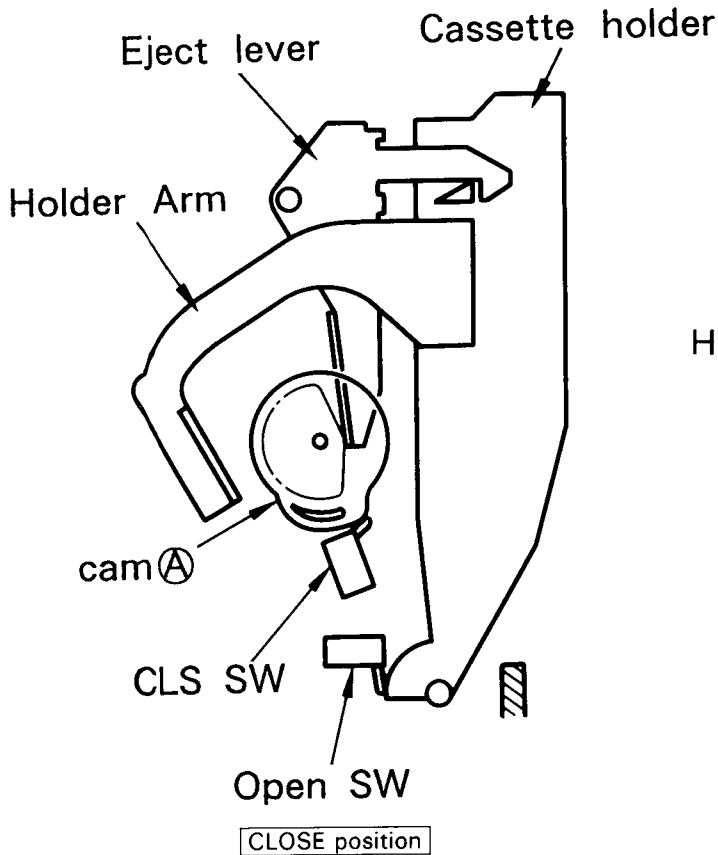
The cam gear is at the position shown in the figure, and the head is lowered.

Moreover, the brake is also lowered.

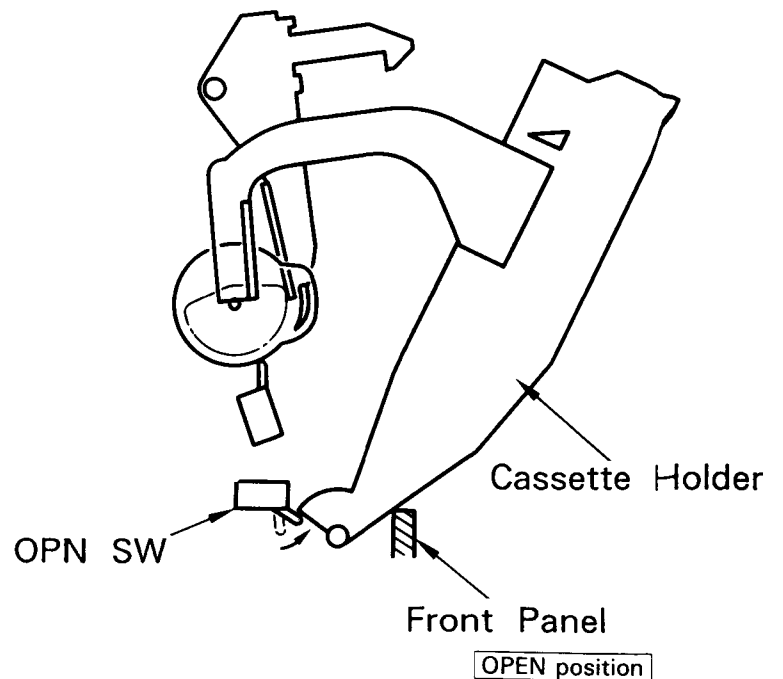
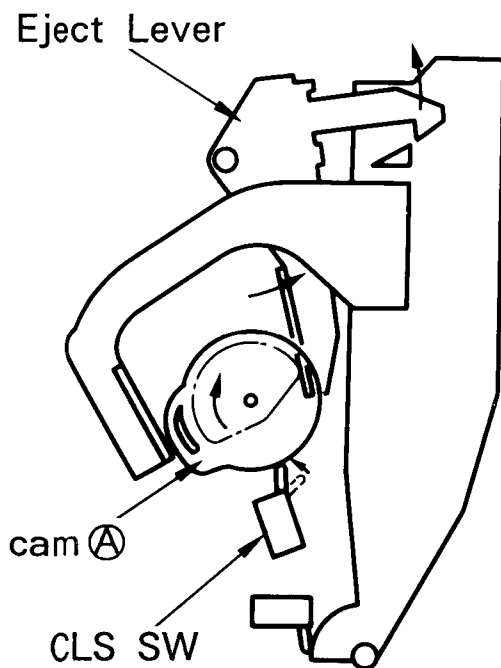
FF/RWD is controlled by the rotation of the reel motor.



MECHANISM DESCRIPTION



- 4) When the cam A further rotates, the boss B begins to open while holding the tongue of the holder arm.



- 1) The cam A starts rotating
- 2) CLS SW turns OFF
- 3) The eject lever moves to the arrow direction, and the holder come off the stopper.

- 5) The cam stops rotating when the cassette holder comes off the OPN SW.
- 6) The cassette holder touches the front panel, and the holder gets at the open position.

ADJUSTMENT

RECORD/PLAYBACK UNIT

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	CASSETTE DECK SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
Unless otherwise specified : each switch should be set as follows: 0dBs = 0.775V TAPE : NORMAL DOLBY : OFF INPUT : LINE CASSETTEE MECHANISM SECTION(REC/PB head adjustment)							
(1)	PLAYBACK LEVEL(1)	MTT-150 400Hz(200nWb)	(B)	PLAY	VR1(L) VR2(R) (X26) (A/5)	Output level : -1.2dBs	
		MTT-256,SCC-1727 315Hz(160nWb)				Output level : -4.0dBs	
		MTT-256U,TCC-160 315Hz(250nWb)				Output level : 0 dBs	
(2)	BIAS CURRENT	(A) 1kHz,-30dBs 10kHz,-30dBs	(B)	Adjust REC VR (LEVEL,BALANCE) so that the REC monitor output becomes -20dBs at 1kHz , then record and reproduce signal of 1kHz and 10kHz in alternation.	VR31(L) VR32(R) (X26) (A/5)	Adjust the bias current adjusting VR so that the playback level of the 10kHz signal is +0.5dB higher than that of the 1kHz signal when recrding a 1kHz signal and a 10kHz signal alternately.	
(3)	RECORD LEVEL	(A) 1kHz,-30dBs	(B)	Record and reproduce a 1kHz signal under the conditions set in (5).	VR21(L) VR22(R) (X26) (A/5)	Adjust the variable resistors so that a playback level of -20dBs is obtained.	
(4)	FL PEAK LEVEL METER	(A) 1kHz,-10dBs	-	REC PAUSE adjust REC VR(LEVEL,BALANCE) so that the monitor output is 0dBs at 1kHz.	VR95(R) (X26) (A/5)	Adjust to the same level as that to L-channel.	
Note : On item (1)							
Although 3 kinds of tapes are set forth for the playback level adjustment , the use of one tape suffices for adjustment . Here is no necessity for the use of all these 3 kinds of tapes. Other than above mentioned tapes , when a test tape equa in magnetic flux and frequency is available, the adjustment is feasible with this test tape by making the playback output suited to the specified output level of this tape in agreement with the adjustment method.							

ADJUSTMENT

MECHANISM

MECHANISM

NO.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	CASSETTE DECK SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
CASSETTE DECK SECTION		TAPE : NORMAL DOLBY : OFF INPUT : LINE				0dBs = 0.775V	
1 REC/PLAY HEAD							
[1]	DEMAGNETIZATION	-	-	POWER : OFF Remove the cassette door.	REC/PLAY head	Demagnetize the REC/PLAY head with a head demagnetizer.	
[2]	CLEANING	-	-	-	REC/PLAY head erase head. capstan. pinch roller.	Clean the REC/PLAY head erase head , capstan and pinch roller, using a cotton swab slightly damped with alcohol.	
[3]	Verification of the rec/ play head.	* MTT-94201	-	PLAY	-	Check that the level difference between the left and right channels is within 4 dB, If the difference exceeds 4 dB, perform the adjustments described in [7].	
[4]	Azimuth	MTT-114 TCC-153 SCC-1727 10kHz,-10dB	-	PLAY	Azimuth adjustment screw Ⓒ	Adjust the output to the maximum, then set the azimuth screw so that the oscilloscope resurge wave- length approaches a 45 deg. linearity.	
[5]	Check with mirror tape	mirror tape	-	PLAY	-	Play back the mirror tape and check that the edges of the tape do not touch the tape guide. If they do , perform the adjustments described in [7] onward.	
[6]	TAPE SPEED	(A) MTT-111, TCC-110,SCC- 1727 3kHz,-4dB	-	PLAY	Trimming potentiometer in the DC motor	Adjust the tape speed so that a 3kHz signal is produced at the center of the tape.	
[7]	Height of the supply pinch arm	THG-801	-	PLAY	Supply pinch arm height adjustment screw Ⓓ	Mount the standard THG-801 1 plate on the cassette receiving plate , then turn the block gage sideways and adjust the screws so that the gage fits in the tape guide.	
[8]	Height of REC/PLAY head	THG-801	-	PLAY	Head height adjustment screw Ⓐ	Mount the standard THG-801 1 plate on the cassette receiving plate , then turn the block gage sideways and adjust the screws so that the gage fits in the tape guide.	

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ADJUSTMENT

MECHANISM

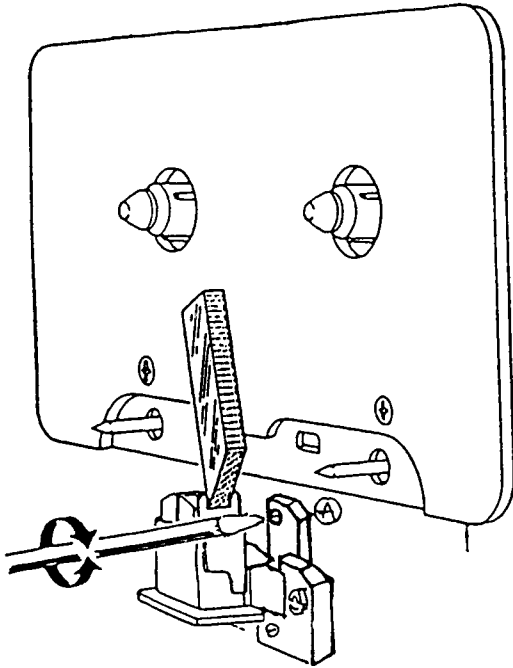
NO.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	CASSETTE DECK SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
CASSETTE DECK SECTION TAPE : NORMAL DOLBY : OFF INPUT : LINE 0dBs = 0.775V							
[9]	rec/play head adjustment	THG-801	-	PLAY	Head tilt adjustment screw Ⓑ	Turn the THG-801 , block gage sideways and position it so that it is perpendicular to the head surface, Adjust screw B so that the gage and standard plate come into close contact.	
The head height can be altered by performing the adjustment in procedure [9] ,so repeat adjustment procedure, [8] and [9] several times.							
[10]	DEMAGNETIZATION	-	-	POWER : OFF Remove the cassette door.	REC/PLAY head	Demagnetize the REC/PLAY head with a head demagnetizer.	
	CLEANING	-	-	-	REC/PLAY head erase head, capstan, pinch roller.	Clean the REC/PLAY head erase head, capstan and pinch roller using a cotton swab slightly dampened with alcohol.	
[11]	Azimuth	SCC-1727 MTT-111 TCC-110 3kHz , -4dB	-	PLAY	Azimuth adjustment screw Ⓒ	Adjust the output to maximum for the 3kHz output then set the azimuth screw C so that the oscilloscope surge wavelength approaches a 45 deg. linearity	
Check the adjustments in procedures [8], [9] and [11]							
[12]	Check the mirror tape	mirror tape	-	PLAY	-	Playback the mirror tape and check that the tape edges are not touching the tape guide . If they are? , repeat procedures [8],[9] and [11] to adjust .	

Return to procedure [3].

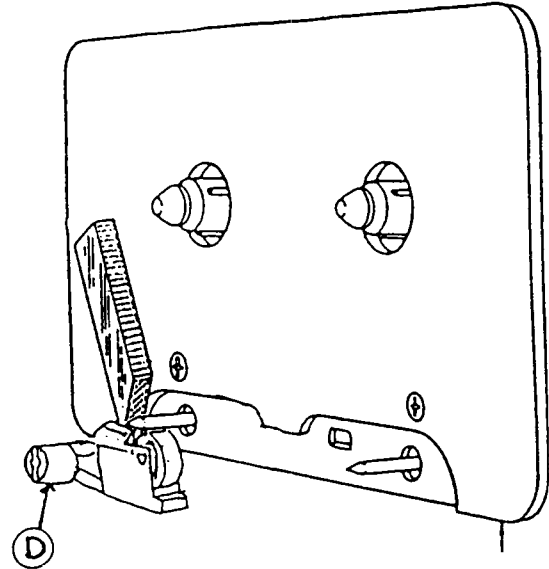
ADJUSTMENT

Adjusting REC/PLAY head

Head height adjustment



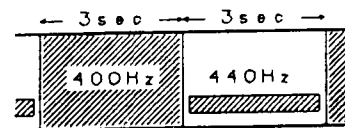
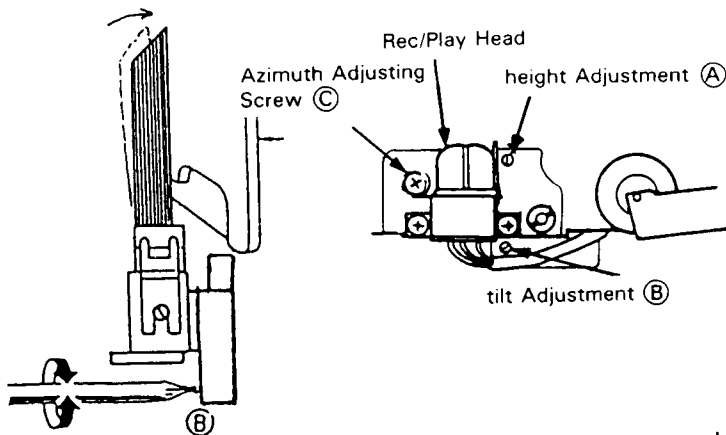
Supply PINCH roller height Adjustment.



※

Head tilt adjustment

* MTT-94201 (TEST TAPE for HEAD height adjustment)

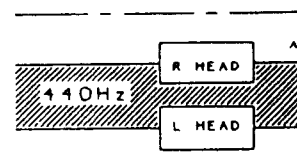
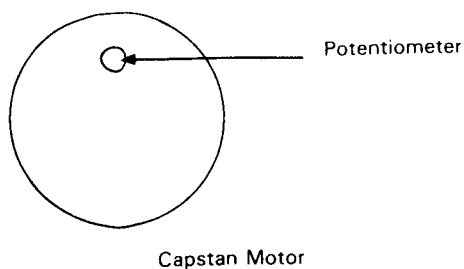


400 Hz Full track

440 Hz 0.8 mm width track

Level difference is about the same of L, R ch output when the adjustment is complete.

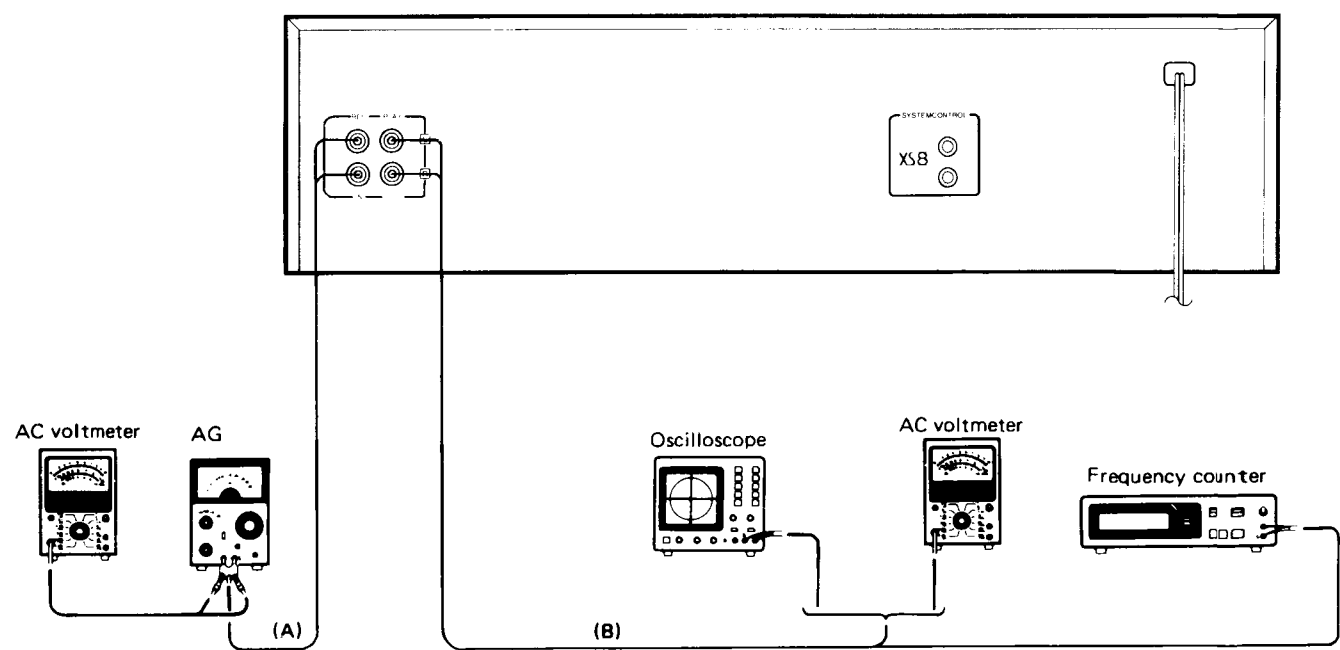
Tape Speed Adjustment



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ADJUSTMENT

Measurement Equipment Connections:



AJUSTES

Núm.	ÍTEM	AJUSTES DE ENTRADA	AJUSTES DE SALIDA	AJUSTES DEL DECK DE CASETES	PUNTOS DE ALINEACIÓN	ALINEACIÓN PARA	FIG.
A menos que se especifique otra cosa, ajuste los controles respectivos de la forma siguiente : TAPE : NORMAL DOLBY : OFF INPUT : LINE SECCIÓN DEL MECANISMO DEL CASETE (Ajuste de la cabeza GRABADORA/REPRODUCTORA)							0 dBs = 0,775 V
(1)	NIVEL DE REPRODUCCIÓN	MTT-150 400Hz (200nWb) MTT-256, SCC-1727 315Hz (160nWb) MTT-256, TCC-160 315Hz (250nWb)	(B)	REPRODUCCIÓN	VR1 (L) VR2 (R) (X26) (A/5)	Nivel de salida : -1,2 dBs Nivel de salida : -4,0 dBs Nivel de salida : 0 dBs	
(2)	CORRIENTE DE POLARIZACIÓN	(A) 1kHz, -30dBs 12.5kHz, -30dBs	(B)	Ajuste REC VR LEVEL, VR21, 22 de forma que la salida del monitor de grabación sea de -20 dBs a 1 kHz, y después grabe y reproduzca alternativamente señales de 1 kHz y 12.5 kHz.	VR31 (L) VR32 (R) (X26) (A/5)	Ajuste la corriente de polarización regulando el resistor variable de forma que el nivel de reproducción de la señal de 10 kHz sea +0,5 dB superior que el de la señal de 1 kHz cuando grabe alternativamente señales de 1 kHz y de 10 kHz.	
(3)	NIVEL DE GRABACIÓN	(A) 1kHz, -30dBs	(B)	Grabe y reproduzca una señal de 1 kHz en las condiciones establecidas en (2).	VR21 (L) VR22 (R) (X26) (A/5)	Ajuste los resistores variables hasta obtener un nivel de reproducción de -20 dBs.	
(4)	MEDIDOR DE NIVEL DE PICO FLUORESCENTE	(A) 1kHz, -10dBs	—	GRABACIÓN EN PAUSA Ajuste REC VR (LEVEL, BALANCE) de forma que la salida del monitor sea de 0 dBs a 1 kHz.	VR95 (R) (X26) (A/5)	Ajuste al mismo nivel que el del canal izquierdo.	
Nota : En el ítem (1)							
Aunque existen 3 tipos de cintas para el ajuste del nivel de reproducción, la utilización de una de ellas será suficiente para el ajuste. Aquí no es necesario utilizar los 3 tipos de cintas. Aunque no sean las cintas mencionadas, si se dispone de una cinta de prueba de flujo magnético y frecuencia iguales, el ajuste será posible con tal cinta haciendo que la salida de reproducción se adecúe al nivel de salida especificado de esta cinta de acuerdo con el método de ajuste.							

AJUSTES

Núm.	ÍTEM	AJUSTES DE ENTRADA	AJUSTES DE SALIDA	AJUSTES DEL DECK DE CASETES	PUNTOS DE ALINEACIÓN	ALINEACIÓN PARA	FIG.
SECCIÓN DEL DECK DE CASETES TAPE : NORMAL DOLBY : OFF INPUT : LINE 1 CABEZA GRABADORA/REPRODUCTORA							0 dBs = 0,775 V
[1]	DESMAGNETIZACIÓN	—	—	POWER : OFF Extraiga la puerta del casete.	Cabeza grabadora/reproductora	Desmagnetice la cabeza grabadora/reproductora con un desmagnetizador de cabezas.	
[2]	LIMPIEZA	—	—	—	Cabeza grabadora/reproductora, cabeza borradora, eje de arrastre, rodillo compresor	Limpie la cabeza grabadora/reproductora, cabeza borradora, eje de arrastre, y rodillo compresor utilizando un palillo de algodón ligeramente humedecido en alcohol.	
[3]	Verificación de la cabeza grabadora/reproductora	MTT-94201	—	REPRODUCCIÓN	—	Compruebe si la diferencia de nivel entre los canales izquierdo y derecho es inferior a 4 dB. Si es superior a 4dB, realice los ajustes descritos en [7].	
[4]	Acimut	MTT-144 TCC-153 SCC-1727 10kHz, — 10dB	—	REPRODUCCIÓN	Tornillo de ajuste del acimut (C)	Ajuste la salida al máximo, y después regule el tornillo de acimut de forma que la longitud de la onda del osciloscopio se acerque a una linealidad de 45 grados.	
[5]	Comprobación con un casete de espejo	Casete de espejo	—	REPRODUCCIÓN	—	Ponga en reproducción la cinta del casete de espejo y compruebe si los bordes de la cinta tocan la guía de la cinta. Si la tocan, realice los ajustes descritos en [7].	
[6]	VELOCIDAD DE LA CINTA	(A) MTT-111 TCC-110 SCC-1727 3kHz, — 4dB	—	REPRODUCCIÓN	Potenciómetro de ajuste del motor de CC	Ajuste la velocidad de la cinta de forma que la señal de 3 kHz se produzca en el centro de la cinta.	
[7]	Altura del brazo compresor de suministro	THG-801	—	REPRODUCCIÓN	Tornillo de ajuste de la altura del brazo compresor de suministro (D)	Monte la placa estándar THG-801 en la placa receptora del casete, y después gire lateralmente el calibrador del bloque y ajuste los tornillos de forma que el calibrador encaje en la guía de la cinta.	
[8]	Altura de la cabeza grabadora/reproductora	THG-801	—	REPRODUCCIÓN	Tornillo de ajuste de la altura de la cabeza	Monte la placa estándar THG-801 en la placa receptora del casete, y después gire lateralmente el calibrador del bloque y ajuste los tornillos de forma que el calibrador encaje en la guía de la cinta.	

AJUSTES

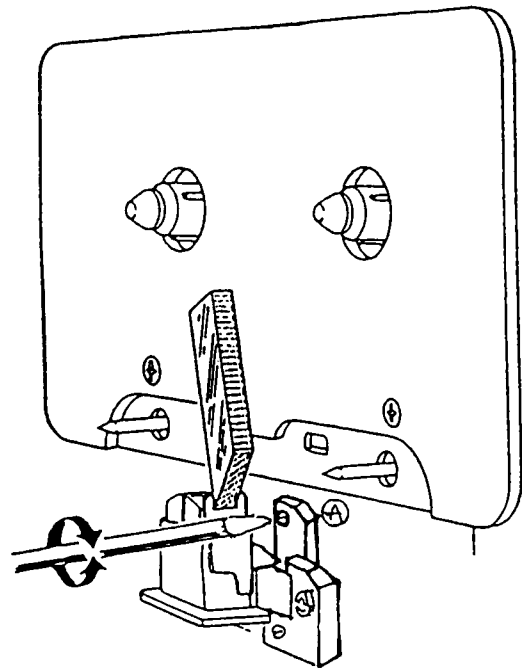
Núm.	ÍTEM	AJUSTES DE ENTRADA	AJUSTES DE SALIDA	AJUSTES DEL DECK DE CASETES	PUNTOS DE ALINEACIÓN	ALINEACIÓN PARA	FIG.
SECCIÓN DEL DECK DE CASETES TAPE : NORMAL DOLBY : OFF INPUT : LINE							0 dBs = 0,775 V
[9]	Ajuste de la cabeza grabadora/reproductora	THG-801	—	REPRODUCCIÓN	Tornillo de ajuste de inclinación de la cabeza (B)	Gire lateralmente el calibrador del bloque THG—801 y colóquelo de forma que quede perpendicular a la superficie de la cabeza. Ajuste el tornillo B de forma que el calibrador y la placa estándar entren en contacto.	
La altura de la cabeza podrá alterarse realizando el ajuste del procedimiento [9], por lo tanto, repita varias veces el procedimiento de ajuste [8] y [9].							
[10]	DESMAGNETIZACIÓN	—	—	POWER : OFF Extraiga la puerta del casete.	Cabeza grabadora/reproductora	Desmagnetice la cabeza grabadora/reproductora con un desmagnetizador de cabezas.	
	LIMPIEZA	—	—	—	Cabeza grabadora/reproductora, cabeza borradora, eje de arrastre, rodillo compresor	Limpie la cabeza grabadora/reproductora, cabeza borradora, eje de arrastre, y rodillo compresor utilizando un palillo de algodón ligeramente humedecido en alcohol.	
[11]	Acimut	SCC-1727 MTT-111 TCC-110 3kHz, —4dB	—	REPRODUCCIÓN	Tornillo de ajuste del acimut (C)	Ajuste la salida al máximo para la salida de 3 kHz y después ajuste el tornillo de acimut (C) de forma que la longitud de la onda del osciloscopio se acerque a una linealidad de 45 grados.	
Comprobación de los ajustes de los procedimientos [8], [9], y [11]							
[12]	Comprobación del casete de espejo	Casete de espejo	—	REPRODUCCIÓN	—	Ponga en reproducción la cinta del casete de espejo y compruebe si los bordes de la cinta tocan la guía de la cinta. Para ajustar, repita los procedimientos [8], [9], y [11].	

KX-5060S

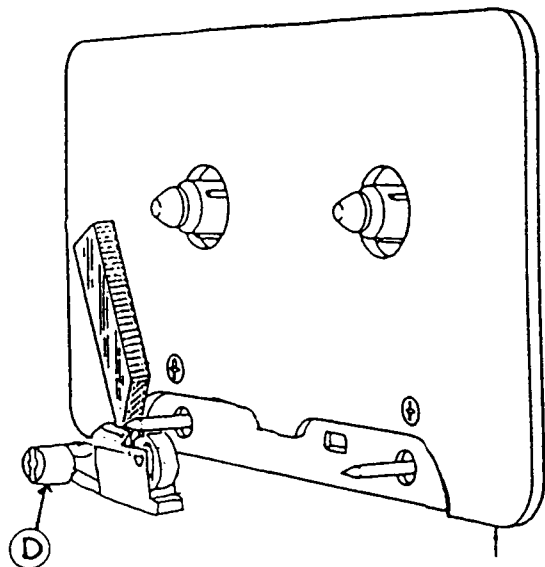
ADJUSTMENT

Adjusting REC/PLAY head

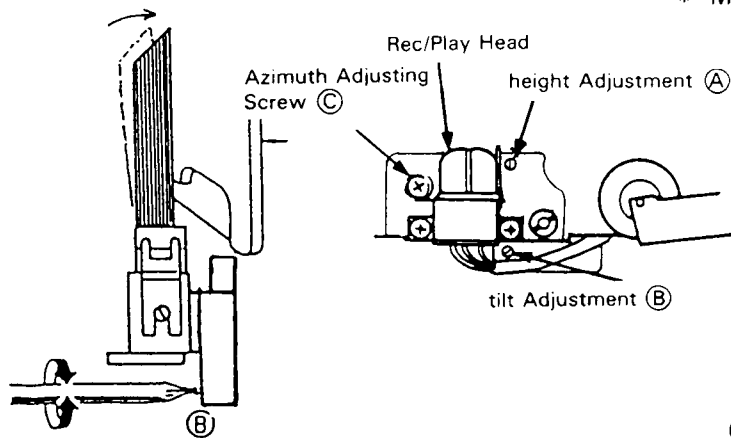
Head height adjustment



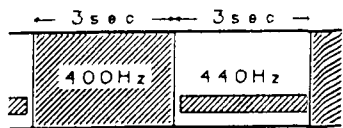
Supply PINCH roller height Adjustment.



Head tilt adjustment



* MTT-94201 (TEST TAPE for HEAD height adjustment)

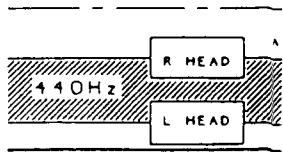
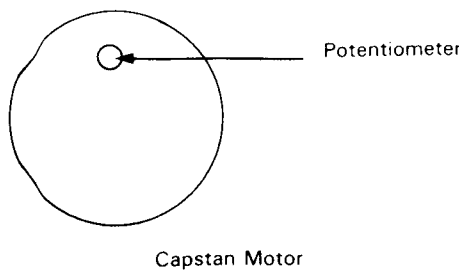


400 Hz Full track

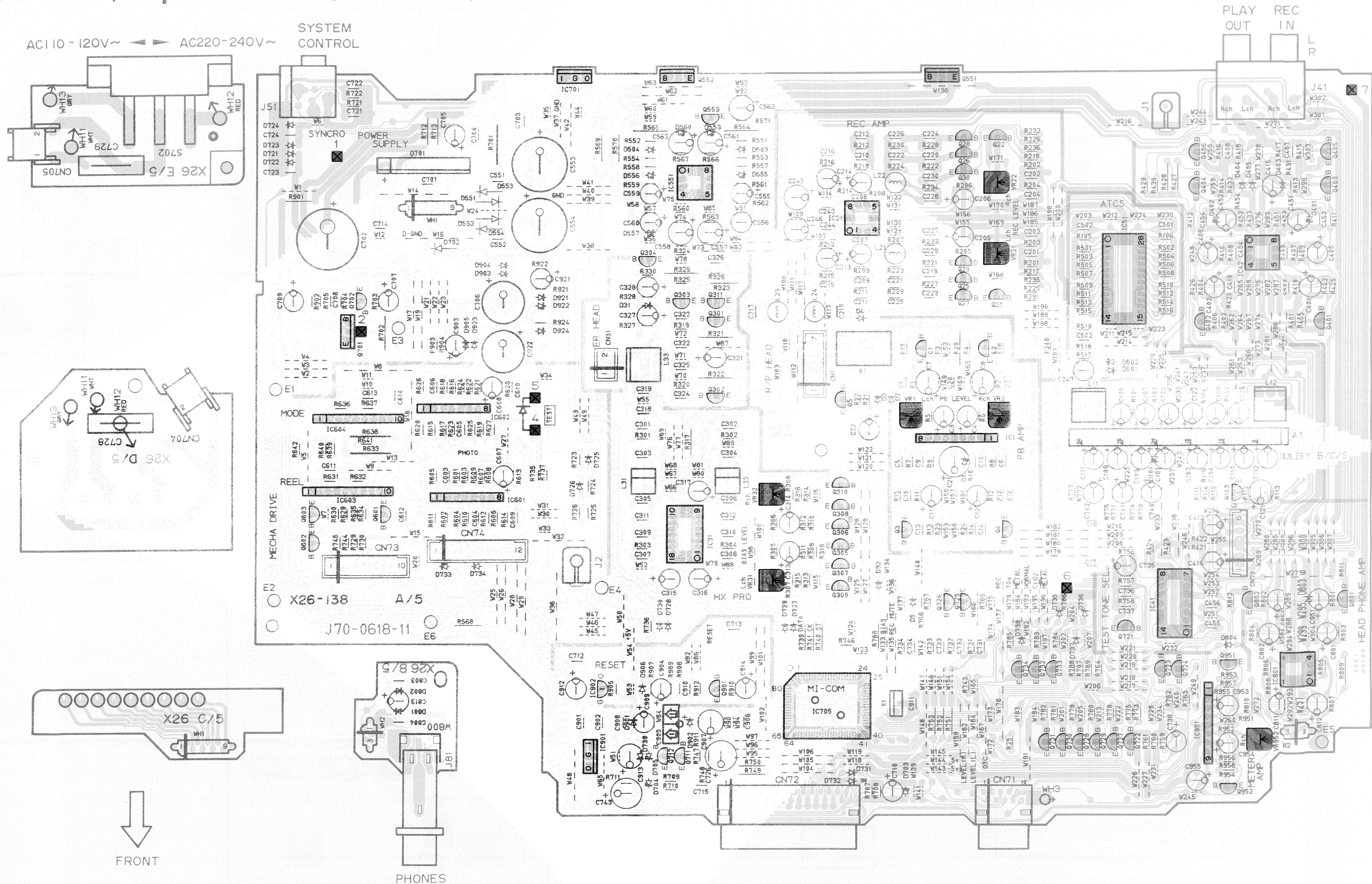
440 Hz 0.8 mm width track

Cuando finalice el ajuste, la diferencia de nivel de la salida de los canales izquierdo y derecho serán aproximadamente iguales.

Tape Speed Adjustment

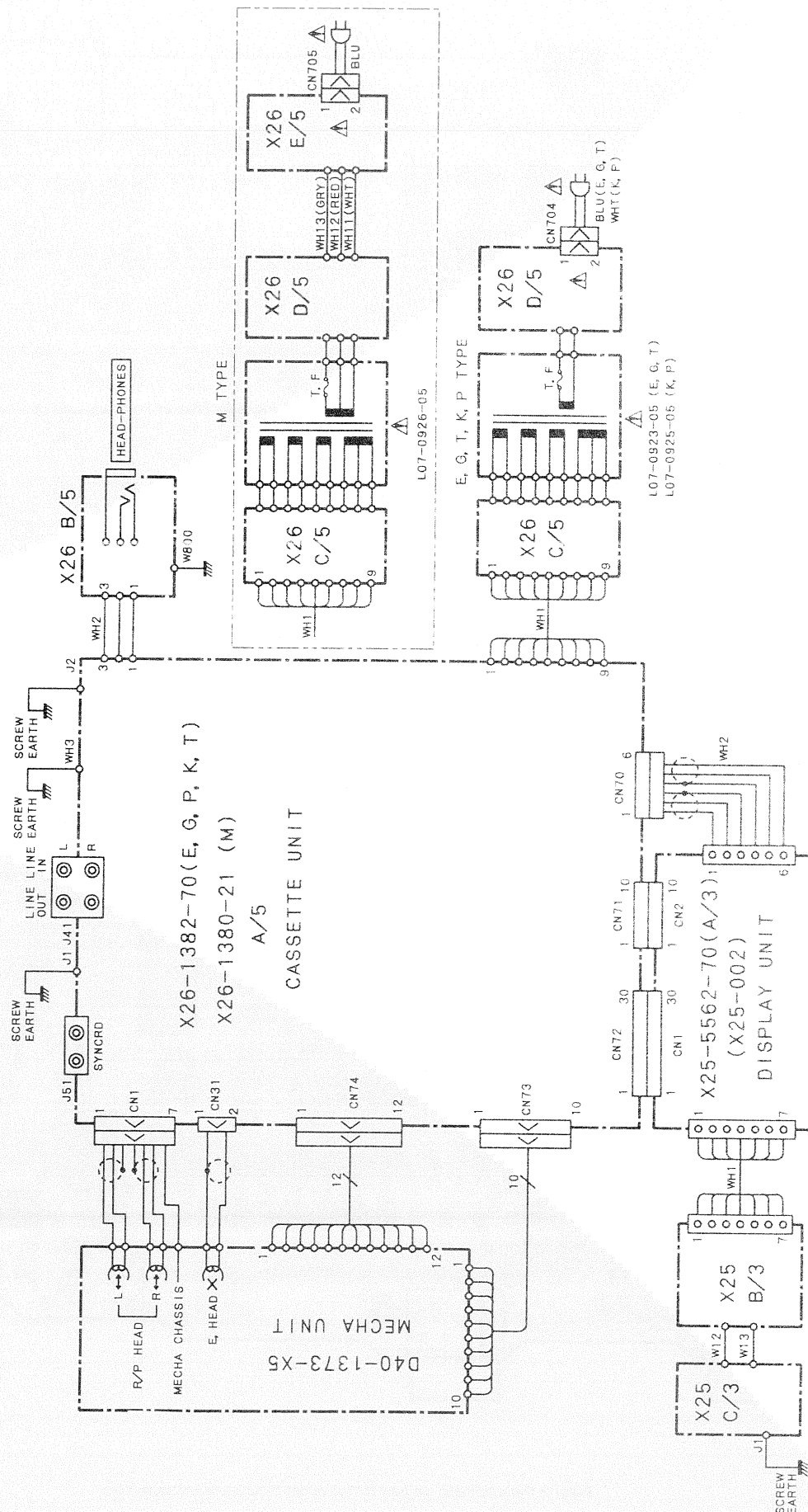


PC BOARD (Component side view) CASSETTE UNIT (X26-138X-XX)

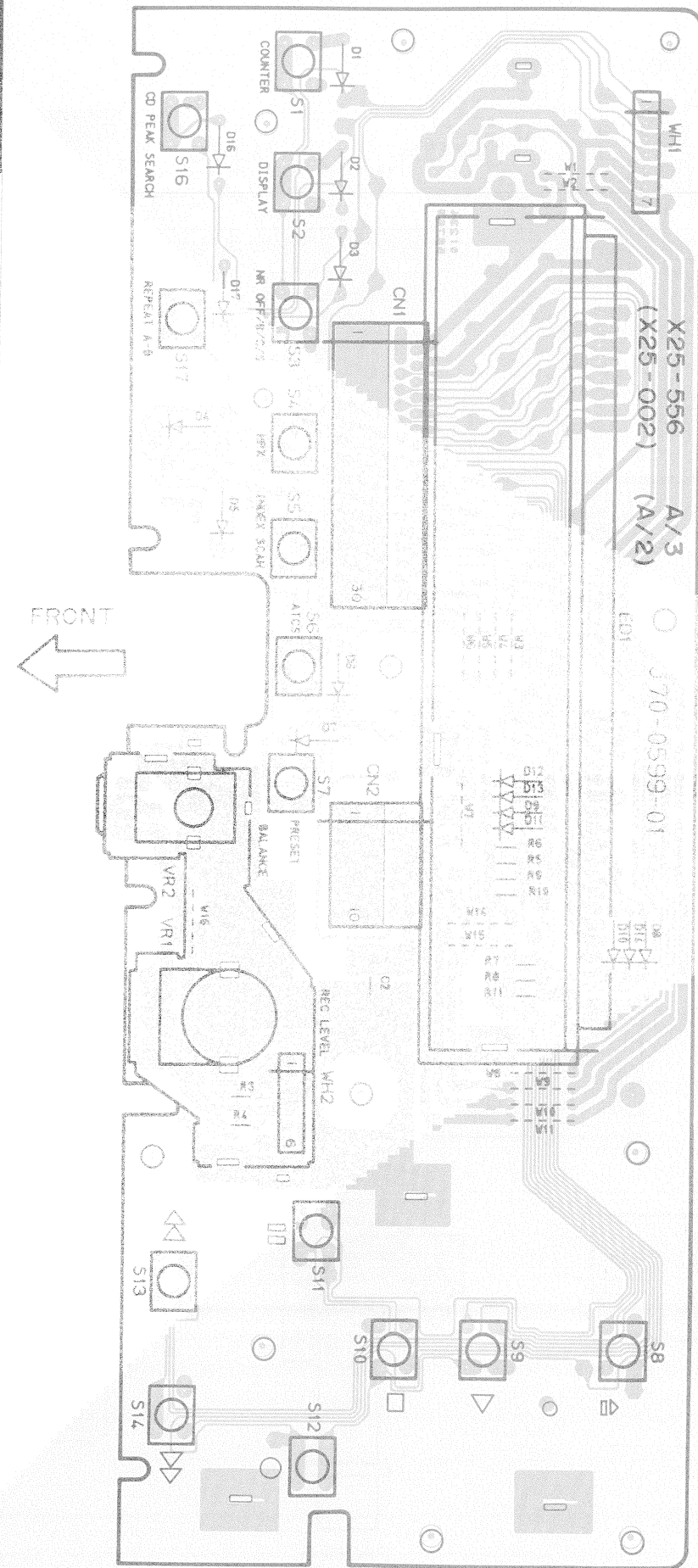


KX-5060S

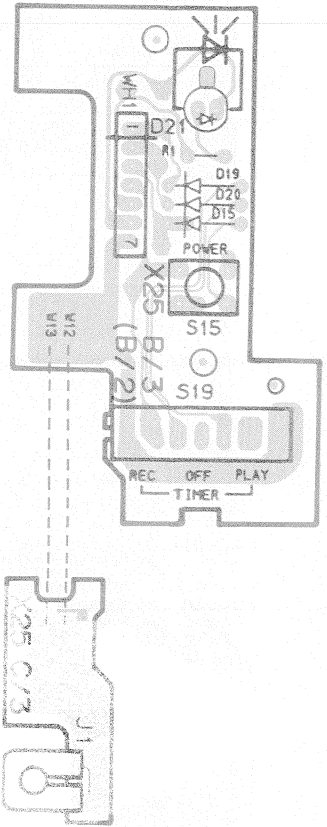
WIRING DIAGRAM



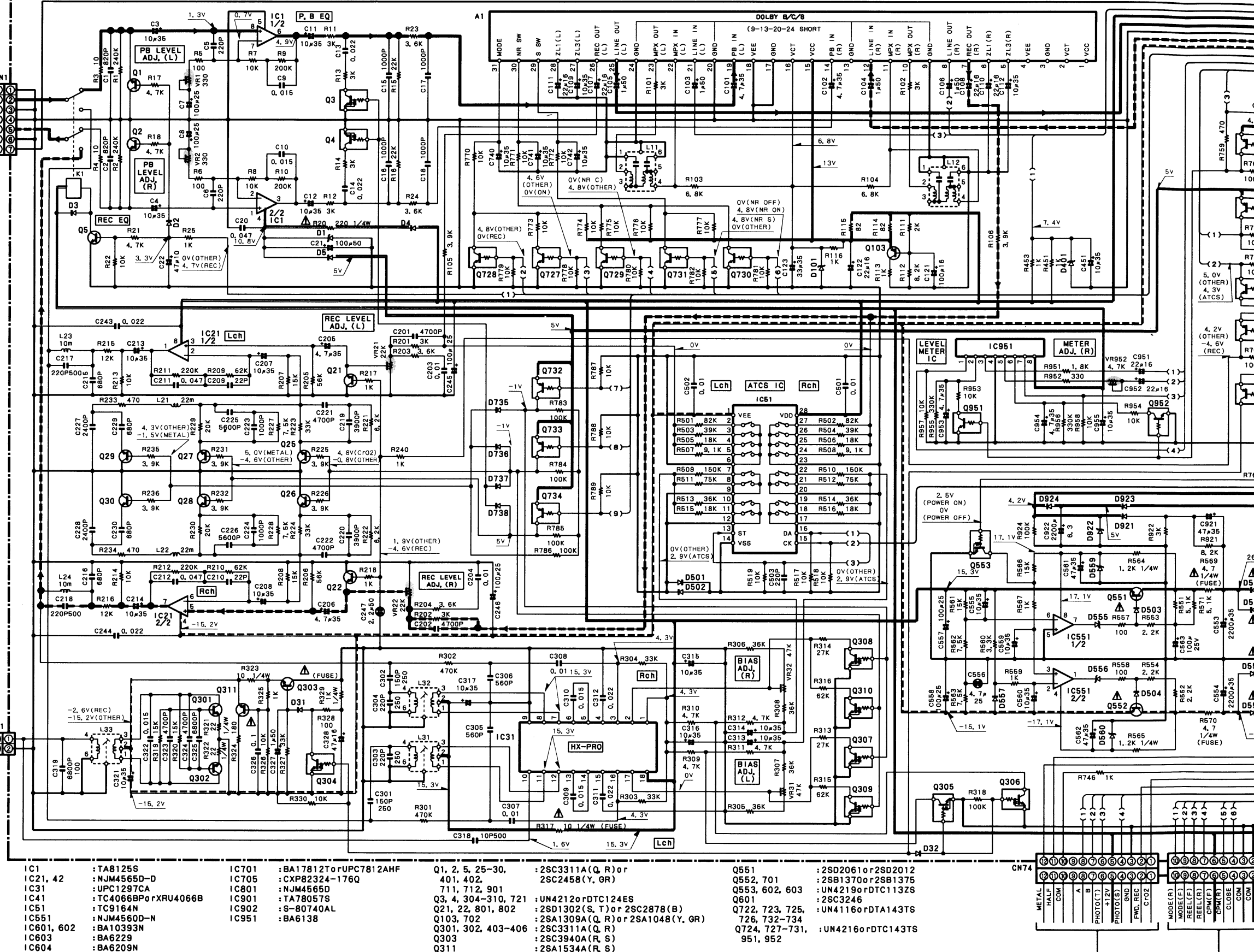
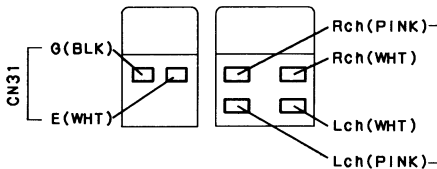
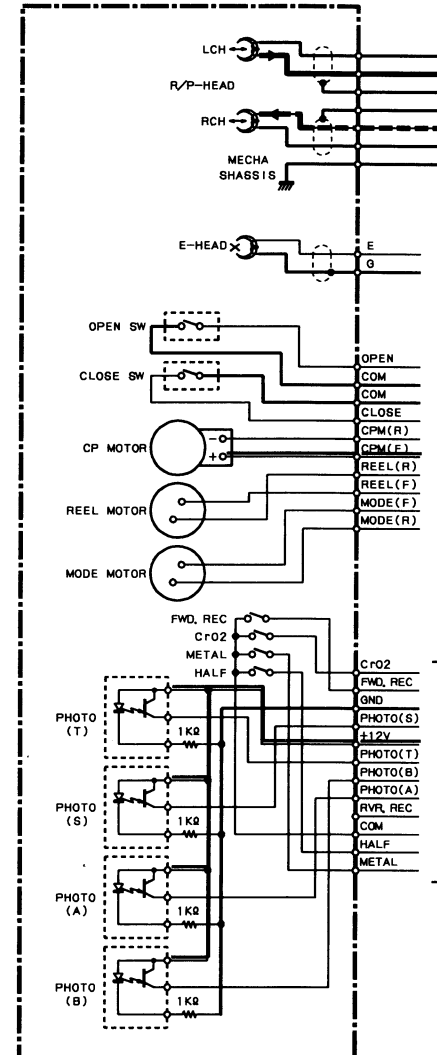
PC BOARD (Component side view) **DISPLAY UNIT X25-5562-71 (X25-002)**



Refer to the schematic diagram for the values of resistors and capacitors.



MECHA D40-1373-X5



IC1	:TA8125S	IC701	:BA178121 or UPC7812AHF
IC21, 42	:NJM4565D-D	IC705	:CXP82324-176Q
IC31	:UPC1297CA	IC801	:NJM4565D
IC41	:TC4066BP or XR4066B	IC901	:TA78057S
IC51	:TC9164N	IC902	:S-80740AL
IC551	:NJM4560D-N	IC951	:BA6138
IC601, 602	:BA10393N		
IC603	:BA6229		
IC604	:BA6209N		

Q1, 2, 5, 25-30,	:2SC3311A(Q, R) or
401, 402,	2SC2458(Y, GR)
711, 712, 901	
Q3, 4, 304-310, 721	:UN4212 or DTC124ES
Q21, 22, 801, 802	:2SD1302(S, T) or 2SC2878(B)
Q103, 702	:2SA1309A(Q, R) or 2SA1048(Y, GR)
Q301, 302, 403-406	:2SC3311A(Q, R)
Q303	:2SC3940A(R, S)
Q311	:2SA1534A(R, S)

Q551	:2SD2061 or 2SD2012
Q552, 701	:2SB1370 or 2SB1375
Q553, 602, 603	:UN4219 or DTC113ZS
Q601	:2SC3246
Q722, 723, 725,	:UN4116 or DTA143TS
726, 732-734	
Q724, 727-731,	:UN4216 or DTC143TS
951, 952	

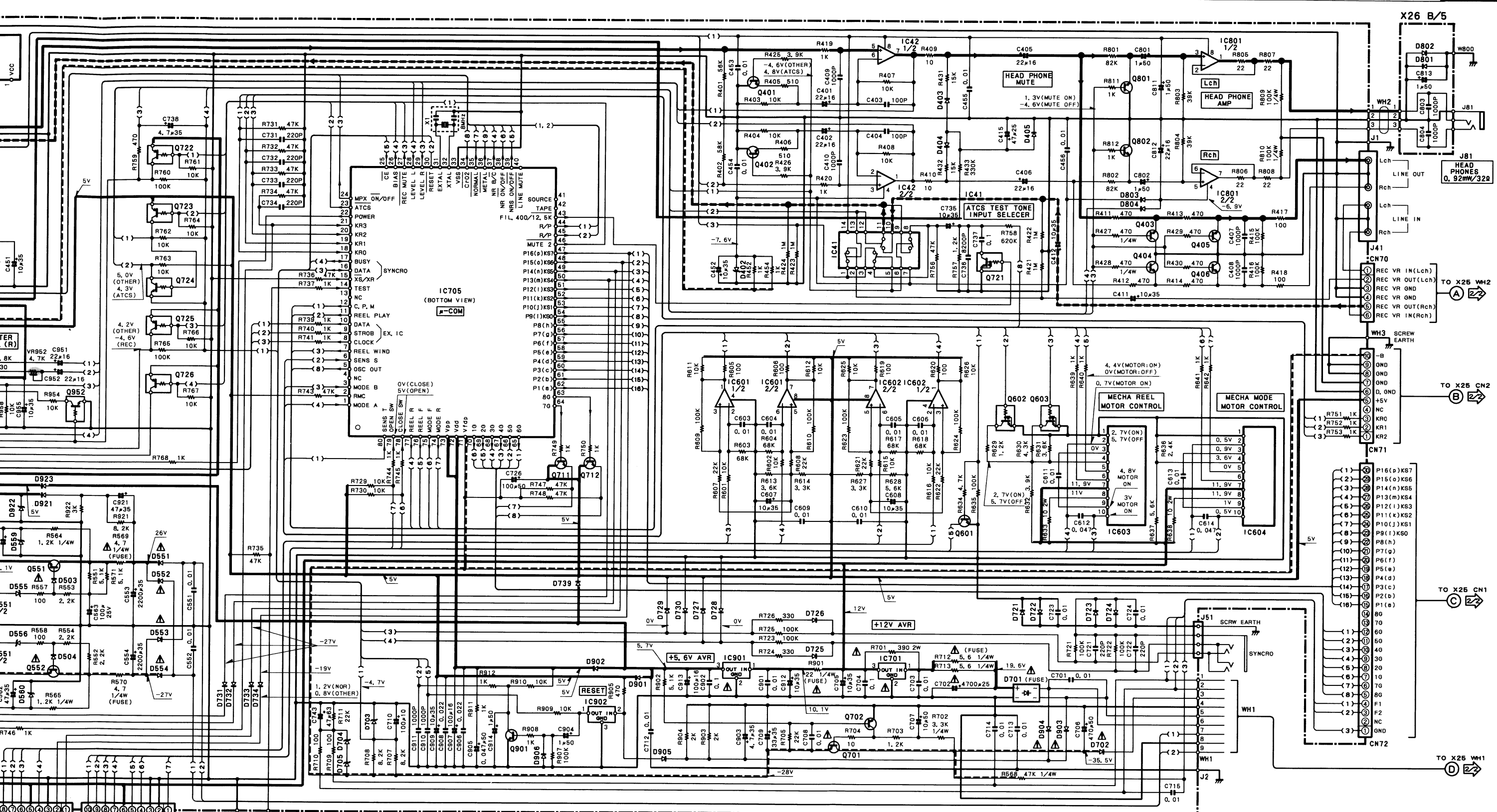
DC voltages are as measured with a high impedance voltmeter with a cassette loaded at playback mode. Values may vary slightly due to variations between individual instruments or/and units. Bias circuit DC voltages are as measured while in the record mode.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance, une cassette étant insérée en mode de lecture. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels. Les tensions c.c. du circuit de polarité doivent être mesurées, l'appareil étant en mode d'enregistrement.

Die angegebenen Gleichspannungswerte wurden bei eingesetzter Cassette in der Wiedergabe mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig. Die angegebenen Gleichspannungswerte der Vor magnetisierungsschaltung wurden in der Aufnahme-Betriebsart gemessen.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). Δ indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

Dolby noise reduction and manufactured under license Licensing Corporation. HX Pro "DOLBY", the double-D symbol marks of Dolby Laboratories Ltd.

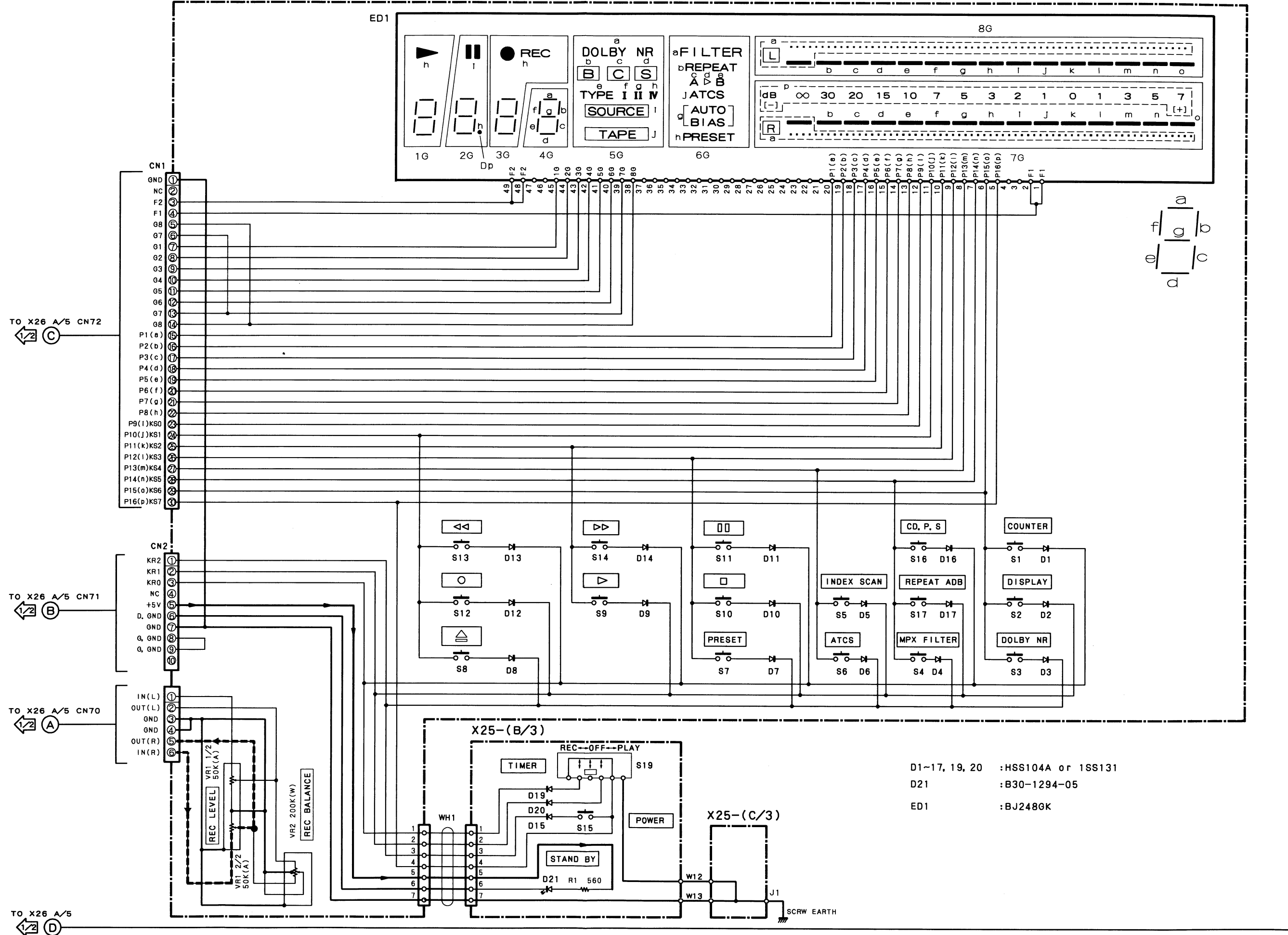


- | | | |
|---|--|---|
| D1 : RD11ES(B2) or HZS11N(B2) | D101 : RD6, 8ES(B2) or HZS6, 8N(B2) | D701 : D3SBA20F03 or RBV-402LFA |
| D2-5, 31, 32 : 1SS133 or HSS104 | D401, 402 : RD7, 5JS(B) or HZS7, 5S(B) | D703 : RD4, 7ES(B) or HZS4, 7N(B) |
| 501, 502, 503 : 1SS133 | D403-405 : S5688B or 1SR139-100 | D704 : RD2, 7ES(B) or HZS2, 7N(B) |
| 504, 721-730 : RD15JS(B) or HZS15S(B) | D551-554, 702 : RD18ES(B) or HZS18N(B) | D705 : RD3, 3ES(B) or HZS3, 3N(B) |
| 735-739, 801-804 : 1SS131 or HSS104A | | D731-734, 903, 904 : RD3, 9ES(B) or HZS3, 9N(B) |
| 901, 902, 905, 906 : RD3, 9ES(B) or HZS3, 9N(B) | | |
| 921, 923, 924 : RD3, 9ES(B) or HZS3, 9N(B) | | |

— SIGNAL LINE
 — GND LINE
 — +B LINE
 - - - -B LINE

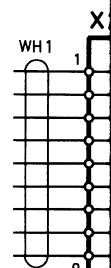
Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen. "DOLBY", the double-D symbol and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

X25-5562-71 (A/3) (X25-002)

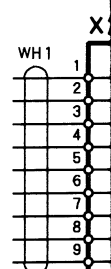


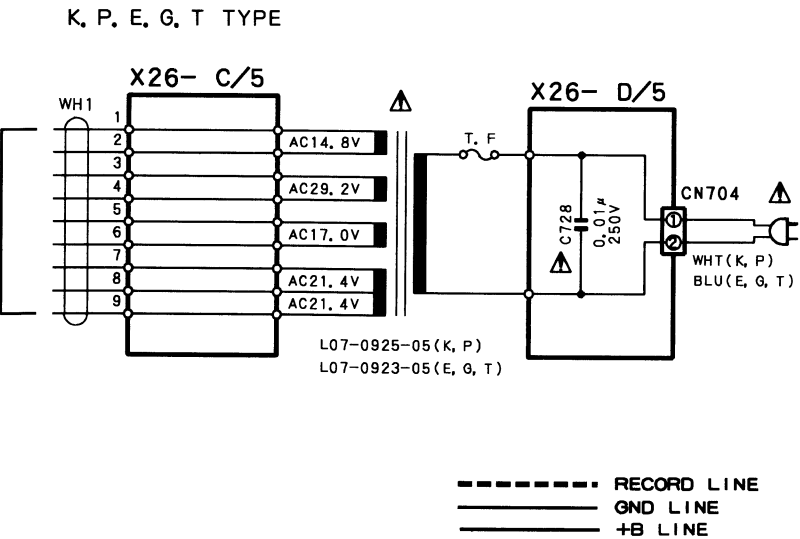
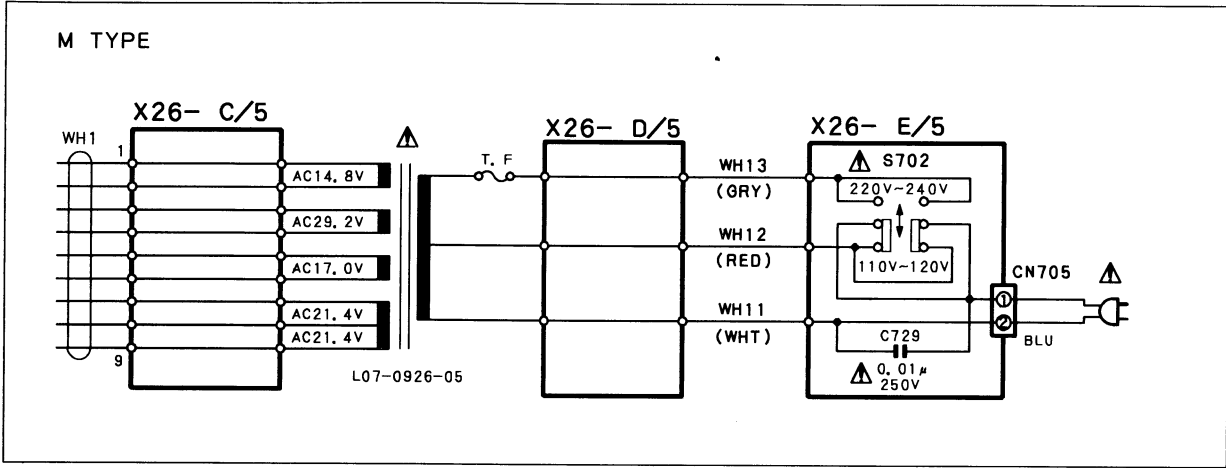
D1~17, 19, 20 :HSS104A or 1SS131
 D21 :B30-1294-05
 ED1 :BJ2480K

M TYPE

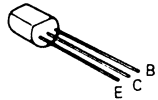


K, P, E.

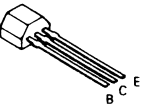




2SA1534A
 2SC2878
 2SC3246
 2SC3940A
 2SD1302



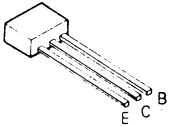
DTA143TS
 DTC124ES
 DTC143TS
 UN4116
 2SA1048
 2SC2458



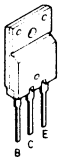
2SB1370
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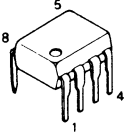
UN4212
 UN4216
 UN4219
 2SA1309A
 2SC3311A



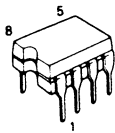
2SB1375
 2SD2012



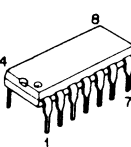
NJM4560D-N



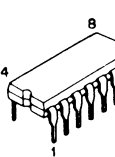
NJM4565D
 NJM4565D-D



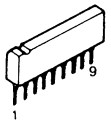
XRU4066B



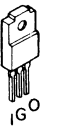
TC4066BP



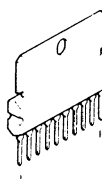
BA6138



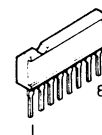
BA17812T
 UPC7812AHF



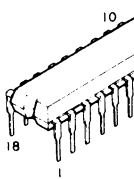
BA6229



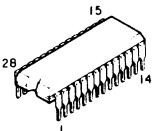
BA10393N



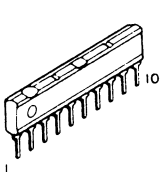
UPC1297CA



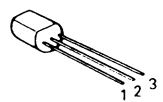
TC9164N



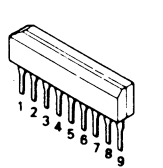
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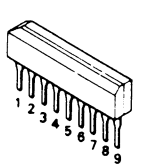
S-80740AL



KAM02



TA8125S



DC voltages are as measured with a high impedance voltmeter with a cassette loaded at playback mode. Values may vary slightly due to variations between individual instruments or/and units. Bias circuit DC voltages are as measured while in the record mode.

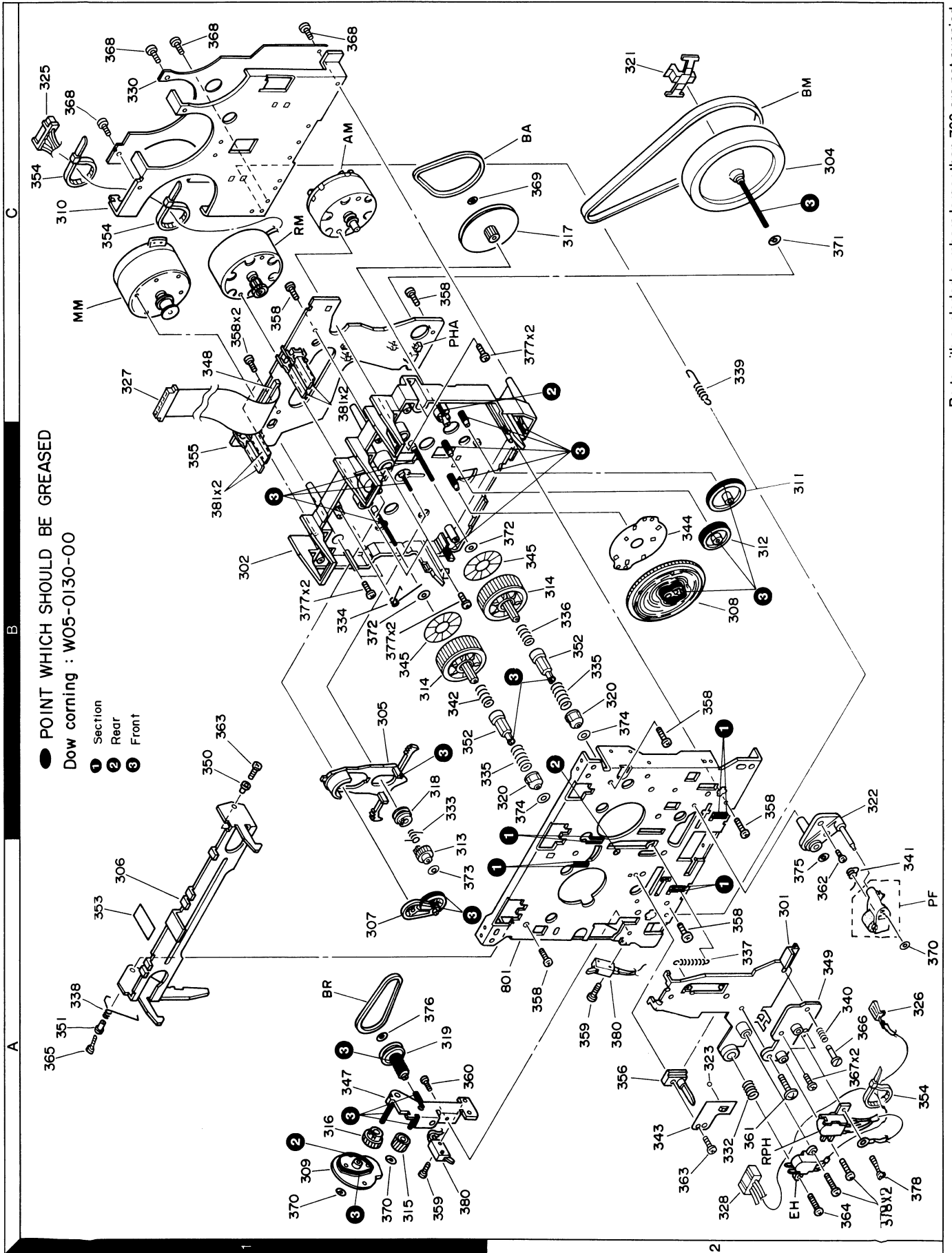
Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance, une cassette étant insérée en mode du lecture. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels. Les tensions c.c. du circuit de polarité doivent être mesurées, l'appareil étant en mode d'enregistrement.

Die angegebenen Gleichspannungswerte wurden bei eingesetzter Cassette in der Wiedergabe mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u. U. geringfügig. Die angegebenen Gleichspannungswerte der Vomagnetisierungsschaltung wurden in der Aufnahme-Betriebsart gemessen.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen. "DOLBY", the double-D symbol and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

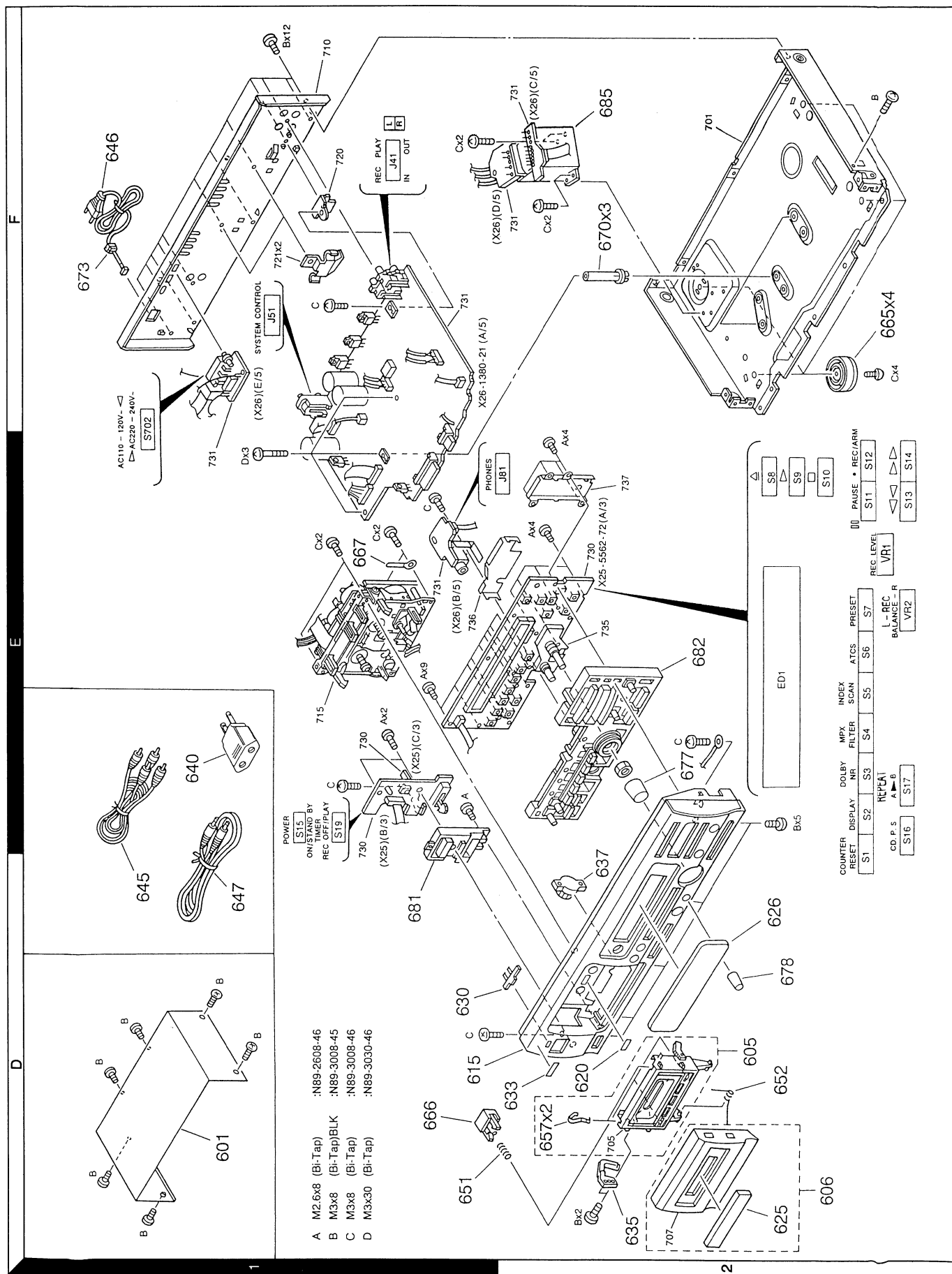
EXPLODED VIEW (MECHANISM UNIT)



Parts with exploded numbers larger than 700 are not supplied.

KX-5060S

EXPLODED VIEW (UNIT)



Parts with exploded numbers larger than 700 are not supplied.

PARTS LIST

No. 2

× New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
677	2E		K29-4384-04	KN08 (REC LEVEL)	
678	2D		K29-4440-04	KN08 (REC BALANCE)	
681	1D	*	K29-5946-05	KN08 (POWER)	
682	2E	*	K29-5990-02	KN08 (FUNCTION)	
685	2F	*	L07-0923-05	POWER TRANSFORMER	EGT
685	2F	*	L07-0925-05	POWER TRANSFORMER	KP
685	2F	*	L07-0926-05	POWER TRANSFORMER	M
DISPLAY UNIT X25-5562-71 (X25-002)					
D21			B30-1294-05	LED	
C2			CK45FF1H103Z	CERAMIC 0.010UF Z	
VR1			R31-0009-05	VARIABLE RESISTOR	
VR2			R31-0008-05	VARIABLE RESISTOR	
S1	-17		S40-1064-05	PUSH SWITCH	
S19			S31-1036-05	SLIDE SWITCH	
D1	-17		HSS104A	DIODE	
D1	-17		1SS131	DIODE	
D19	20		HSS104A	DIODE	
D19	20		1SS131	DIODE	
ED1		*	RJ248GK	INDICATOR TUBE	
CASSETTE UNIT (X26-1382-70-E, G, K, R, T 0-21:M)					
C1	2		CF92FV1H821J	MF 820PF J	
C3	4		CE04KW1V100M	ELECTR0 100F J 35WV	
C5	6		CC45FSL1H221J	CERAMIC 220PF J	
C7	8		CE04KW1E101M	ELECTR0 100UF 25WV	
C9	10		CF92FV1H153J	MF 0.015UF J	
C11	12		CE04KW1V100M	ELECTR0 10UF 35WV	
C13	14		CF92FV1H223J	MF 0.022UF J	
C15	-18		CK45FB1H102K	CERAMIC 1000PF K	
C20			CF92FV1H473J	MF 0.047UF J	
C21			CE04KW1H101M	ELECTR0 100UF 50WV	
C22			CE04KW1A470M	ELECTR0 47UF 10WV	
C101	102		CE04KW1V4R7M	ELECTR0 4.7UF 35WV	
C103	106		CE04KW1H010M	ELECTR0 1.0UF 50WV	
C107	108		CE04KW1C220M	ELECTR0 22UF 16WV	
C109			CE04KW1V100M	ELECTR0 100F 35WV	
C110	111		CE04KW1C220M	ELECTR0 22UF 16WV	
C112			CE04KW1V100M	ELECTR0 100F 35WV	
C121			CE04KW1C101M	ELECTR0 100UF 16WV	
C122			CE04KW1C220M	ELECTR0 22UF 16WV	
C123			CE04KW1V330M	ELECTR0 33UF 35WV	
C201	202		CF92FV1H472J	MF 4700PF J	
C203	204		CE92FV1H103J	MF 0.010UF J	
C205	206		CE04KW1V4R7M	ELECTR0 4.7UF 35WV	
C207	208		CE04KW1V100M	ELECTR0 100F 35WV	
C209	210		CC45FSL1H220J	CERAMIC 22PF J	
C211	212		CF92FV1H473J	MF 0.047UF J	
C213	214		CE04KW1V100M	ELECTR0 100F 35WV	
C215	216		CK45FB1H681K	CERAMIC 680PF K	
C217	218		CC45FSL2H221J	CERAMIC 220PF J	
C219	220		CF92FV1H392J	MF 3900PF J	
C221	222		CF92FV1H472J	MF 4700PF J	
C223	224		CF92FV1H102J	MF 1000PF J	

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No. 1

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KX-5060S					
601	1D	*	A01-3136-01	METALLIC CABINET	
605	2D		A53-1368-23	CASSETTE HOLDER ASSY	
606	2D	*	A53-1823-13	CASSETTE LID ASSY	
615	1D	*	A60-0629-01	PANEL	
620	2D		B03-1691-04	DRESSING SEAL	
625	2D		B10-2018-04	FRONT GLASS (LID)	
626	2D		B10-2053-04	FRONT GLASS (FRONT)	
630	1D	*	B12-0239-04	INDICATOR	
633	2D		B43-0287-04	KENWOOD BADGE	
-	-	*	B46-0092-43	WARRANTY CARD	K
-	-	*	B46-0121-33	WARRANTY CARD	P
-	-	*	B46-0310-03	WARRANTY CARD	EGT
-	-	*	B58-0945-03	CAUTION CARD	T
-	-	*	B58-0964-13	CAUTION CARD	KP
-	-	*	B58-0965-13	CAUTION CARD	PT
-	-	*	B58-0966-13	CAUTION CARD	EM
-	-	*	B58-0970-13	CAUTION CARD	G
-	-	*	B60-1569-00	INSTRUCTION MANUAL (DUT. ITA)	E
-	-	*	B60-1569-00	INSTRUCTION MANUAL (GERMAN)	EG
-	-	*	B60-1721-00	INSTRUCTION MANUAL (ENGLISH)	EKPT
-	-	*	B60-1722-00	INSTRUCTION MANUAL (FRENCH)	EP
-	-	*	B60-1723-00	INSTRUCTION MANUAL (SPANISH)	EM
-	-	*	B60-1724-00	INSTRUCTION MANUAL (CHINESE)	M
-	-	*	B60-1725-00	INSTRUCTION MANUAL (TAIWANESE)	M
635	2D		D10-3435-04	ARM	
637	2D		D39-0200-05	DAMPER	
640	1E		E03-0115-05	AC PLUG ADAPTER	M
645	1D		E30-0505-05	AUDIO CORD	
646	1F		E30-2592-15	AC POWER CORD	EGM
646	1F		E30-2650-05	AC POWER CORD	KP
646	1F		E30-2721-05	AC POWER CORD	T
647	1D		E30-2733-05	CORD WITH PLUG	
651	1D		G01-3503-04	COMPRESSION SPRING	
652	2D		G01-3504-14	TOBSSION CØIL SPRING	
657	2D		G02-1008-04	FLAT SPRING	
-	-		H10-5489-02	POLYSTYRENE FOAMED FIXTURE	EKGPM
-	-		H10-5490-02	POLYSTYRENE FOAMED FIXTURE	EKGPM
-	-		H10-5491-02	POLYSTYRENE FOAMED FIXTURE	T
-	-		H10-5492-02	POLYSTYRENE FOAMED FIXTURE	T
-	-	*	H12-2229-04	PACKING FIXTURE	
-	-		H20-0586-04	PROTECTION COVER	M
-	-		H25-0232-04	PROTECTION BAG (235X350X0.03)	EKGPM
-	-		H25-0362-04	PROTECTION BAG	EKGPT
-	-		H25-0651-04	PROTECTION BAG (0232 PRINTED)	T
-	-	*	H50-1188-04	ITEM CARTON CASE	EKGPM
-	-	*	H50-1189-04	ITEM CARTON CASE	T
665	2F		J02-1034-05	FØØT	
666	1D		J11-0140-04	CLAMPER ASSY	
667	1E		J19-0306-05	LEAD HOLDER	
670	2F		J19-3703-04	UNIT HOLDER	
673	7F		J43-0083-05	POWER CORD BUSHING	

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PARTS LIST

No. 4

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
C709			CE04KW1V330M	ELECTR0	
C710			CE04KW1A101M	ELECTR0	
C712-714			CK45FF1H103Z	33UF	35WV
C715			CF92FV1H103J	100UF	10WV
C721, 722			CE04KW1E101M	0.010UF	Z
			CE04KW1E101M	0.010UF	J
C723, 724			CE04KW1H221J	220PF	J
C728			CE04KW1H221J	0.010UF	Z
C729			CE04KW1H221J	100UF	50WV
C731-734			CE04KW1H221J	0.010UF	250VAC
			CE04KW1H221J	0.010UF	250VAC
C735			CE04KW1H221J	0.010UF	J
C736			CE04KW1H221J	0.010UF	J
C737			CE04KW1H221J	0.010UF	J
C738			CE04KW1H221J	0.010UF	J
C740-742			CE04KW1H221J	0.010UF	J
			CE04KW1H221J	0.010UF	J
C743			CE04KW1H221J	0.010UF	J
C801, 802			CE04KW1H221J	0.010UF	J
C803, 804			CE04KW1H221J	0.010UF	J
C811			CE04KW1H221J	0.010UF	J
C812			CE04KW1H221J	0.010UF	J
C813			CE04KW1H221J	0.010UF	J
C901			CE04KW1H221J	0.010UF	J
C902			CE04KW1H221J	0.010UF	J
C903			CE04KW1H221J	0.010UF	J
C904			CE04KW1H221J	0.010UF	J
C905			CE04KW1H221J	0.010UF	J
C906			CE04KW1H221J	0.010UF	J
C907			CE04KW1H221J	0.010UF	J
C908			CE04KW1H221J	0.010UF	J
C909			CE04KW1H221J	0.010UF	J
C910			CE04KW1H221J	0.010UF	J
C911			CE04KW1H221J	0.010UF	J
C912			CE04KW1H221J	0.010UF	J
C913			CE04KW1H221J	0.010UF	J
C914			CE04KW1H221J	0.010UF	J
C921			CE04KW1H221J	0.010UF	J
C922			CE04KW1H221J	0.010UF	J
C951, 952			CE04KW1H221J	0.010UF	J
C953, 954			CE04KW1H221J	0.010UF	J
C955			CE04KW1H221J	0.010UF	J
J41			CE04KW1H221J	0.010UF	J
J51			CE04KW1H221J	0.010UF	J
J81			CE04KW1H221J	0.010UF	J
W800			CE04KW1H221J	0.010UF	J
L11, 12			CE04KW1H221J	0.010UF	J
L21, 22			CE04KW1H221J	0.010UF	J
L23, 24			CE04KW1H221J	0.010UF	J
L31, 32			CE04KW1H221J	0.010UF	J
L33			CE04KW1H221J	0.010UF	J
X1			CE04KW1H221J	0.010UF	J
R20			CE04KW1H221J	0.010UF	J
R317			CE04KW1H221J	0.010UF	J
R321, 322			CE04KW1H221J	0.010UF	J
R323			CE04KW1H221J	0.010UF	J

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No. 3

Ref. No. 参照番号	Address 位置	New Parts 新部品	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
C225, 226			CF92FV1H562J	MF	
C227, 228			CF92FV1H242J	MF	
C229, 230			CK45FB1H681K	CERAMIC	
C243, 244			CF92FV1H223J	MF	
C245, 246			CE04KW1E101M	ELECTR0	
C247			CE04KW1E101M	NP-ELEC	
C301, 302			CE04KW1H221J	NP-ELEC	
C303, 304			CE04KW1H221J	NP-ELEC	
C305, 306			CE04KW1H221J	NP-ELEC	
C307, 308			CE04KW1H221J	NP-ELEC	
C309, 310			CE04KW1H221J	NP-ELEC	
C311, 312			CE04KW1H221J	NP-ELEC	
C313-317			CE04KW1H221J	NP-ELEC	
C318			CE04KW1H221J	NP-ELEC	
C319			CE04KW1H221J	NP-ELEC	
C321			CE04KW1H221J	NP-ELEC	
C322			CE04KW1H221J	NP-ELEC	
C323, 324			CE04KW1H221J	NP-ELEC	
C325			CE04KW1H221J	NP-ELEC	
C326			CE04KW1H221J	NP-ELEC	
C327			CE04KW1H221J	NP-ELEC	
C328			CE04KW1H221J	NP-ELEC	
C401, 402			CE04KW1H221J	NP-ELEC	
C403, 404			CE04KW1H221J	NP-ELEC	
C405, 406			CE04KW1H221J	NP-ELEC	
C407-410			CE04KW1H221J	NP-ELEC	
C411, 412			CE04KW1H221J	NP-ELEC	
C415			CE04KW1H221J	NP-ELEC	
C451, 452			CE04KW1H221J	NP-ELEC	
C453, 454			CE04KW1H221J	NP-ELEC	
C455, 456			CE04KW1H221J	NP-ELEC	
C501, 502			CE04KW1H221J	NP-ELEC	
C503			CE04KW1H221J	NP-ELEC	
C551, 552			CE04KW1H221J	NP-ELEC	
C553, 554			CE04KW1H221J	NP-ELEC	
C555			CE04KW1H221J	NP-ELEC	
C556			CE04KW1H221J	NP-ELEC	
C557, 558			CE04KW1H221J	NP-ELEC	
C559, 560			CE04KW1H221J	NP-ELEC	
C561, 562			CE04KW1H221J	NP-ELEC	
C563			CE04KW1H221J	NP-ELEC	
C603-606			CE04KW1H221J	NP-ELEC	
C607, 608			CE04KW1H221J	NP-ELEC	
C609-611			CE04KW1H221J	NP-ELEC	
C612			CE04KW1H221J	NP-ELEC	
C613			CE04KW1H221J	NP-ELEC	
C614			CE04KW1H221J	NP-ELEC	
C701			CE04KW1H221J	NP-ELEC	
C702			CE04KW1H221J	NP-ELEC	
C703			CE04KW1H221J	NP-ELEC	
C704			CE04KW1H221J	NP-ELEC	
C705			CE04KW1H221J	NP-ELEC	
C706			CE04KW1H221J	NP-ELEC	
C707			CE04KW1H221J	NP-ELEC	
C708			CE04KW1H221J	NP-ELEC	

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No. 5

Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
R329			R014NB2E102J	RD		
R431, 432			RN14BK2C1502F	1.0K	J 1/4W	
R564, 565			R014NB2E122J	15.0K	F 1/6W	
R569, 570			R92-0341-05	1.2K	J 1/4W	
R633			RS14KB30100J	CARBON FILM RESISTOR		
			FL-PR00F RS 10	FL-PR00F RS 10	J 2W	
R638			RS14KB30100J	FL-PR00F RS 10	J 2W	
R701			RS14KB30191J	FL-PR00F RS 390	J 2W	
R702			R014NB2E332J	RD	J 1/4W	
R712, 713			R92-0265-05	FUSE RESIST 5.6	J 1/4W	
R901			R92-0508-05	FUSE RESIST 22	G 1/4W	
VR1, 2			R12-0606-05	TRIMMING POT.(330)		
VR21, 22			R12-3666-05	TRIMMING POT.(22K)		
VR31, 32			R12-3668-05	TRIMMING POT.(47K)		
VR952			R12-1619-05	TRIMMING POT.(4.7K)		
K1			S76-0027-05	MAGNETIC RELAY		
S702			S62-0001-05	SLIDE SWITCH		M
A1			KAM02	HYBRID IC		
D1			HZS11N(B2)	ZENER DIODE		
D1			R011ES(B2)	ZENER DIODE		
D2 -5			HSS104	DIODE		
D2 -5			1SS133	DIODE		
D31, 32			HSS104	DIODE		
D31, 32			1SS133	DIODE		
D101			HZS6.8N(B2)	ZENER DIODE		
D401, 402			R06.8ES(B2)	ZENER DIODE		
			HZS7.5S(B)	ZENER DIODE		
D401, 402			R07.5JS(B)	ZENER DIODE		
D403-405			1SS133	DIODE		
D501-504			HSS104	DIODE		
D501-504			1SS133	DIODE		
D551-554			S5688B	DIODE		
D551-554			1SR139-100	DIODE		
D555-557			HZS13S(B)	ZENER DIODE		
D555-557			R015JS(B)	ZENER DIODE		
D559, 560			HZS18N(B)	ZENER DIODE		
D559, 560			R018ES(B)	ZENER DIODE		
D701			D3SBA20F03	DIODE		
D701			RBV-402LFA	DIODE		
D702			S5688B	DIODE		
D702			1SR139-100	DIODE		
D703			HZS4.7N(B)	ZENER DIODE		
D703			R04.7ES(B)	ZENER DIODE		
D704			HZS2.7N(B)	ZENER DIODE		
D704			R02.7ES(B)	ZENER DIODE		
D705			HZS3.3N(B)	ZENER DIODE		
D705			R03.3ES(B)	ZENER DIODE		
D721-730			HSS104	DIODE		
D721-730			1SS133	DIODE		
D731-734			HSS104A	DIODE		
D731-734			1SS131	DIODE		
D735-739			HSS104	DIODE		
D735-739			1SS133	DIODE		
D801-804			HSS104	DIODE		
D801-804			1SS133	DIODE		

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No. 6

Ref. No. 参照番号	Address 位置	New Parts	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 備考
D901, 902			HSS104	DIODE		
D901, 902			1SS133	DIODE		
D903, 904			HSS104A	DIODE		
D903, 904			1SS131	DIODE		
D905, 906			HSS104	DIODE		
D905, 906			1SS133	DIODE		
D921			HSS104	DIODE		
D921			1SS133	DIODE		
D922			HZS3.9N(B)	ZENER DIODE		
D922			R03.9ES(B)	ZENER DIODE		
D923, 924			HSS104	DIODE		
D923, 924			1SS133	DIODE		
IC01			TA8125S	IC(2CH PRE AMP)		
IC01			NJM4565D-D	IC(OP AMP X2)		
IC31			UPC1297CA	IC(DOL HX PR0 SYSTEM)		
IC41			TC40668P	IC(ANALOG/ DIGITAL SW)		
IC41			XR40066B	ANALOGUE IC		
IC42			NJM4565D-D	IC(OP AMP X2)		
IC51			TC9164N	IC(16CH BILATERAL SELECTOR SW)		
IC551			NJM4560D-N	IC(OP AMP X2)		
IC601, 602			BA10393N	IC(DUAL COMPARATOR)		
IC603			BA6229	IC(MOTOR DRIVER)		
IC604			BA6209N	IC(MOTOR DRIVER)		
IC701			BA17812T	IC(VOLTAGE REGULATOR/ +12V)		
IC701			UPC7812AHF	IC(VOLTAGE REGULATOR/ +12V)		
IC705			CXP82324-176Q	MI-COM IC		
IC801			NJM4565D	IC(OP AMP X2)		
IC901			TA78057S	IC(VOLTAGE REGULATOR/+5.75V)		
IC902			S-80740AL	IC(VOLTAGE DETECTOR)		
IC951			BA6138	IC(ROOT AMP X2)		
Q1, 2			2SC2458(Y, GR)	TRANSISTOR		
Q1, 2			2SC3311A(Q, R)	TRANSISTOR		
Q3, 4			DT0124ES	DIGITAL TRANSISTOR		
Q3, 4			UN4212	TRANSISTOR		
Q5			2SC2458(Y, GR)	TRANSISTOR		
Q5			2SC3311A(Q, R)	TRANSISTOR		
Q21, 22			2SC2878(B)	TRANSISTOR		
Q21, 22			2SD1302(S, T)	TRANSISTOR		
Q25 -30			2SC2458(Y, GR)	TRANSISTOR		
Q25 -30			2SC3311A(Q, R)	TRANSISTOR		
Q103			2SA1048(Y, GR)	TRANSISTOR		
Q103			2SA1309A(Q, R)	TRANSISTOR		
Q301, 302			2SC3311A(Q, R)	TRANSISTOR		
Q303			2SC3940A(R, S)	TRANSISTOR		
Q304-310			DT0124ES	DIGITAL TRANSISTOR		
Q304-310			UN4212	TRANSISTOR		
Q401-406			2SA1534A(R, S)	TRANSISTOR		
Q401, 402			2SC3311A(Q, R)	TRANSISTOR		
Q403-406			2SC2458(Y, GR)	TRANSISTOR		
Q551			2SD2012	TRANSISTOR		
Q551			2SD2061	TRANSISTOR		
Q552			2SB1370	TRANSISTOR		
Q552			2SB1375	TRANSISTOR		
Q553			DT01132S	DIGITAL TRANSISTOR		

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PARTS LIST

KX-5060S

KX-5060S

PARTS LIST

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No. 8

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
328	2A	✱	E35-1057-08	RP HEAD READ	
330	1C		F39-0066-08	HOLDER	
332	2A		G01-1244-08	HEAD SPRING	
333	1B		G01-3521-08	PULLEY GEAR SPRING	
334	1B		G01-3522-08	BRAKE ARM SPRING	
335	2B		G01-3523-08	REEL SPRING	
336	2B		G01-3524-08	BACK TENSION SPRING	
337	2A		G01-3527-08	HEAD SHASSIS SPRING	
338	1A	✱	G01-3528-08	EJECT LEVER SPRING	
339	2C		G01-3529-08	EARTH SPRING	
340	2A		G01-3637-08	AZIMUTH SPRING	
341	2A		G01-3639-08	PINCH ROLLER SPRING	
342	1B	✱	G01-3752-08	BACK TENTION SPRING	
343	2A		G02-1033-08	PRESS SP	
344	2B		G16-0790-08	MODE REFLECTOR	
345	1B, 2B		G16-0791-08	REFLECTOR SEAL	
347	1A	✱	J19-3521-08	LOADING HOLDER ASSY	
348	1C		J19-3550-08	CABLE HOLDER	
349	2A		J21-6161-08	HEAD BASE PLATE ASSY	
350	1B		J31-0853-08	COLLAR RIGHT	
351	1A		J31-0854-08	COLLAR LEFT	
352	1B, 2B		J42-0191-08	REEL BUSH	
353	1A		J60-0022-08	ACETATE TAPE 9X20	
354	1C		J61-0095-08	SKB OPT TIE 0P-80	
355	1B		J70-0320-08	MECHA PCB	
356	2A		J90-0695-08	CASSETTE GUIDE (B)	
358	1C, 2B		N09-2871-08	TAPPING SCREW M2X6	
359	1A, 2A		N09-2872-08	TAPPING SCREW M1.7X8	
360	1A		N09-2877-08	TAP TITE SCREW M2X4	
361	2A		N09-2951-08	AZIMUTH SCREW	
362	2A		N09-2962-08	BIND TAP TITE SCREW M2.6X6	
363	1B		N09-2963-08	TAP TITE SCREW M2X6	
364	2A		N09-2964-08	BINDING SCREW M2X9	
365	1A		N09-2966-08	TAP TITE SCREW M2X8	
366	2A		N09-3037-08	AZIMUTH SCREW	
367	2A		N09-3038-08	CHILT SCREW	
368	1C		N09-3042-08	BIND TAPPING SCREW	
369	2C		N19-1031-08	POLY WASHER /1.6X3.5X0.5	
370	1A, 2A		N19-1242-08	POLY WASHER /2.1X5.0X0.5	
371	2C		N19-1321-08	POLY WASHER /2.6X6.0X0.25	
372	1B, 2B		N19-1322-08	TEFRON WASHER /2.1X5.0X0.25	
373	1A		N19-1344-08	POLY WASHER /1.5X5.0X0.13	
374	2B		N19-1358-08	POLY WASHER /1.6X3.5X0.25	
375	2A	✱	N19-1368-08	NYLON WASHER /2.43X5.0X0.5	
376	1A		N29-0206-04	E RING /2.0	
377	1B		N30-2604-46	PAN SCREW M2.6X4	
378	2A		N35-2004-46	BINDING SCREW M2X4	
380	1A, 2A		S74-0011-08	SWITCH MLS-1	
381	1B, 1C		S74-0016-08	SELECT SWITCH	
BA	2C		D16-0341-08	DRIVE BELT	
BM	2C		D16-0370-08	DRIVE BELT	
BR	1A	✱	D16-0340-08	DRIVE BELT	
PF	2A		D14-0359-08	PINCH ROLLER ASSY	
EH	2A		T32-0326-08	ERACE HEAD	

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Δ indicates safety critical components.

✱ New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
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No. 7

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向備考
Q553			UN4219	TRANSISTOR	
G601			2SC3246	TRANSISTOR	
G602, 603			DT01132S	DIGITAL TRANSISTOR	
G701			UN4219	TRANSISTOR	
Q701			2SB1370	TRANSISTOR	
Q702			2SB1375	TRANSISTOR	
Q702			2SA1048(Y, GR)	TRANSISTOR	
Q711, 712			2SA1309A(Q, R)	TRANSISTOR	
Q711, 712			2SC2456(Y, GR)	TRANSISTOR	
Q721			2SC3311A(Q, R)	TRANSISTOR	
Q721			DT0124ES	DIGITAL TRANSISTOR	
Q722, 723			UN4212	TRANSISTOR	
Q722, 723			DTA143TS	DIGITAL TRANSISTOR	
Q724			UN4116	TRANSISTOR	
G725, 726			DT0143TS	DIGITAL TRANSISTOR	
G727-731			UN4216	TRANSISTOR	
Q732-734			DTA143TS	DIGITAL TRANSISTOR	
Q732-734			UN4116	TRANSISTOR	
G801, 802			2SC2878(B)	TRANSISTOR	
G801, 802			2SD1302(S, T)	TRANSISTOR	
Q901			2SC2456(Y, GR)	TRANSISTOR	
Q901			2SC3311A(Q, R)	TRANSISTOR	
G951, 952			DT0143TS	DIGITAL TRANSISTOR	
G951, 952			UN4216	TRANSISTOR	
MECHANISM ASSY (D40-1373-X5)					
301	2A	✱	A10-3156-08	HEAD CHASSIS ASSY	
302	1B		A11-0769-08	MECHA BASE ASSY	
304	2C		D01-0160-08	FLYWHEEL	
305	2B		D10-3290-08	BRAKE ARM	
306	1A		D10-3292-08	EJECT LEVER	
307	1A		D10-3323-08	FRICTION ARM ASSY	
308	2B		D12-0143-08	MODE CAM	
309	1A		D12-0144-08	LOADING CAM	
310	1C		D12-0145-08	PCB HOLDER	
311	2B		D13-1503-08	GEAR	
312	2B		D13-1504-08	GEAR	
313	1A		D13-1505-08	GEAR	
314	1B, 2B		D13-1506-08	REEL GEAR	
315	1A		D13-1509-08	GEAR	
316	1A		D13-1510-08	GEAR	
317	2C		D15-0335-08	PULLEY GEAR (MB)	
318	1B		D15-0336-08	PULLEY GEAR (LA)	
319	1A		D15-0339-08	PULLEY GEAR	
320	2B		D19-0270-18	REEL CAP	
321	2C		D23-0303-08	CAPSTAN SPACER	
322	2B		D23-0304-08	HOUSING ASSY	
323	2A		D90-0037-08	STEEL BALL	
325	1C		E30-2727-08	CONNECTOR WIRE 10P	
326	2A		E35-0576-08	E HEAD READ	
327	1C		E35-0911-08	MECHA WIRE 12P	

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PARTS LIST

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No. 9

Ref. No. 参照番号	Address 位置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
RPH	2A		T34-0344-08	REC/PLAY HEAD		
AM	1C		T42-0630-08	MOTOR MA ASSY		
MM	1C		T42-0653-08	MOTOR CAP ASSY		
RM	1C		T42-0655-08	MOTOR RA ASSY		
PHA	1C		T95-0125-08	PHOT0 INTERRUPTER (SG107LF)		
PHB	1C		T95-0125-08	PHOT0 INTERRUPTER (SG107LF)		
PHS	1C		T95-0125-08	PHOT0 INTERRUPTER (SG107LF)		
PHT	1C		T95-0125-08	PHOT0 INTERRUPTER (SG107LF)		5

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KX-5060S

SPECIFICATIONS

Track System	4-track, 2-channel stereo
Recording System	AC bias (Frequency: 105 kHz)
Heads	Playback / recording head
 1
	Erasing head
 1
Motors	DC motor × 3
Fast Winding Time	Approx. 90 seconds (C-60 tape)
Frequency Response:	
Normal Tape	20 Hz to 18,000 Hz, ± 3 dB
CrO ₂ Tape	20 Hz to 18,000 Hz, ± 3 dB
Metal Tape	20 Hz to 19,000 Hz, ± 3 dB
Signal-to Noise Ratio:	
Dolby S NR ON	80 dB (metal tape)
Dolby C NR ON	74 dB (Metal tape)
Dolby B NR ON	67 dB (Metal tape)
Dolby NR OFF	58 dB (Metal tape)

Harmonic Distortion Less than 1.7 %
(at 1 kHz, 3rd H.D.Metal Tape)
Wow and Flutter 0.06 % (W.R.M.S.)
± 0.16 % (DIN)

Input sensitivity / Impedance:
 LINE IN 100 mV / 47 k Ω
Output Level / Impedance:
 LINE OUT 775 mV / 1 k Ω
 Headphones 0.9 mW / 32 Ω

[GENERAL]

Power Consumption 25 W
Dimensions W: 440 mm (17-5 / 16")
 H: 127 mm (5")
 D: 276 mm (10-7 / 8")
Weight (Net) 4.4 kg (9.7 lb)

Note:

KENWOOD follows a policy of continuous advancements in development. For this reason specification may be changed without notice.

KENWOOD CORPORATION

14-6, Dogenzaka 1-chome, Shibuya-ku, Tokyo, 150 Japan

KENWOOD SERVICE CORPORATION

P.O. BOX 22745, 2201 East Dominguez St., Long Beach, CA 90801-5745 U.S.A.

KENWOOD ELECTRONICS CANADA INC.

6070 Kestrel Road, Mississauga, Ontario, Canada L5T 1S8

KENWOOD ELECTRONICS LATIN AMERICA S.A.

P.O. BOX 55-2791, Piso 6 Plaza Chase, Cl. 47 y Aquilino de la Guardia, Panama Republic de Panama

TRIO-KENWOOD U.K. LIMITED

KENWOOD House, Dwight Road, Watford, Herts, WD1 8EB United Kingdom

KENWOOD ELECTRONICS BENELUX N.V.

Mechelsesteenweg 418 B-1930 Zaventem, Belgium

KENWOOD ELECTRONICS DEUTSCHLAND GMBH

Rembrücker Str. 15, 63150 Heusenstamm, Germany

TRIO-KENWOOD FRANCE S.A.

13 Boulevard Ney, 75018 Paris, France

KENWOOD ELECTRONICS ITALIA S.p.A.

Via G. Sirtori, 7/9 20129 Milano, Italy

KENWOOD ESPAÑA S.A.

Bolivia, 239-08020 Barcelona, Spain

KENWOOD ELECTRONICS AUSTRALIA PTY. LTD (A.C.N. 001 499 074)

P.O. BOX 504, 8 Figtree Drive, Australia Centre, Homebush, N.S.W. 2140, Australia

KENWOOD & LEE ELECTRONICS, LTD.

Unit 3712-3724, Level 37 Tower 1, Metroplaza, 223 Hing Fong Road, Kwai Fong, T. Hong Kong

KENWOOD ELECTRONICS SINGAPORE PTE LTD

No. 1 Genting Lane # 07-00, KENWOOD Building, Singapore, 1334

KENWOOD ELECTRONICS (MALAYSIA) SDN BHD

10th Floor, Block B, Wisma Semantan, No. 12, Jalan Gelenggang, Bukit Damansara, 50490 Kuala Lumpur, Malaysia

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on the general market (M) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.